No.01

Oki Data CONFIDENTIAL

B410/B420
B430/B440
Monochrome LED Page Printer
Product specifications

[Rev.3]

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1. GENERAL

1.1 Outline

The B4xx is an electrophotographic printer which converts computer text and graphics into pulses of light which “write” images on a photo-sensitive drum. Dry toner powder is attracted to the drum, and the drum transfers the toner to the paper surface where it is permanently fixed by a heated roller.

The printer’s light source is a Light Emitting Diode (LED) array which consists of about 5,000 (B410/B420:600dpi) or 10,000 (B430/B440:1200dpi) elements in a single row. LED array provides a superior optical stability and high reliability because they require no moving parts.

The imaging system uses an organic photo-conductor (OPC) image drum; and a dry, single-component, non-magnetic toner powder.

The fixing system employs heat and pressure using a heated roller.

		B410d	B410dn	B420dn	B430d	B430dn	B440dn
Engine speed (letter/A4)		30/28	30/28	30/28	30/28	30/28	30/28
Resolution	Max. resolution	2400 x 600 dpi	2400 x 600 dpi	2400 x 600 dpi	1200 x 1200 dpi	1200 x 1200 dpi	1200 x 1200 dpi
Emulation	Standard	PCL6/SIDM	PCL6/SIDM	PCL6/SIDM	PCL6/PS3/SIDM	PCL6/PS3/SIDM	PCL6/PS3/SIDM
	Option	N/A	N/A	N/A	N/A	N/A	N/A
Operation panel	LCD display	16 character x 2	16 character x 2	16 character x 2	16 character x 2	16 character x 2	16 character x 2
	Switch	1 (online/offline)	1 (online/offline)	6	6	6	6
	LED lights	2	2	2	2	2	2
Input tray (Manual/Auto)		Single sheet manual feed	Single sheet manual feed	50 sheets Multi Purpose Tray	50 sheets Multi Purpose Tray	50 sheets Multi Purpose Tray	50 sheets Multi Purpose Tray
Input tray (1st bin)(20 lb paper)		250 sheets	250 sheets	530 sheets	250 sheets	250 sheets	530 sheets
Maximum Input capacity		781	781	1110	830	830	1110
Interface	USB 2.0	✓	✓	✓	✓	✓	✓
	Parallel	✓	✓	✓	✓	✓	✓
	Ethernet	N/A	✓	✓	N/A	✓	✓
Auto Duplex		Standard	Standard	Standard	Standard	Standard	Standard
Monthly Duty Cycle	Maximum	50,000 pages	50,000 pages	70,000 pages	70,000 pages	70,000 pages	70,000 pages
Starter Toner@ISO19752		1,500	1,500	1,500	1,500	1,500	1,500
Toner life@ISO19752		3,500	3,500 (7,000 available for JPN only)	3,500/7,000/ 10,000	3,500/7,000	3,500/7,000	3,500/7,000/ 10,000
Dimensions (inch./mm)	Width	14.5”/369mm	14.5”/369mm	14.5”/369mm	14.5”/369mm	14.5”/369mm	14.5”/369mm
	Depth	15.6"/395mm	15.6"/395mm	15.6"/395mm	15.6"/395mm	15.6"/395mm	15.6"/395mm
	Height	10.6"/268mm	10.6"/268mm	11.7"/297mm	10.6"/268mm	10.6"/268mm	11.7"/297mm
Sales Territories	ODA 100v	✓	✓	✓	N/A	✓	N/A
	ODA 200v	✓	✓	✓	N/A	✓	N/A
	OEL	✓	✓	N/A	✓	✓	✓
	AOS 1byte	✓	✓	N/A	✓	✓	✓
	AOS 2byte	✓	✓	N/A	✓	✓	✓
	Japan	N/A	✓	N/A	N/A	✓	N/A
	China	N/A	✓	N/A	N/A	✓	N/A

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1.2 Features

1) High printing quality
   B4xx employs an LED array for light source.
   The 600 dpi or 1200 dpi solid state LED array provides high quality printing.

2) Operator maintenance
   User replaceable parts have been designed to make the user replacement of cartridges easy.

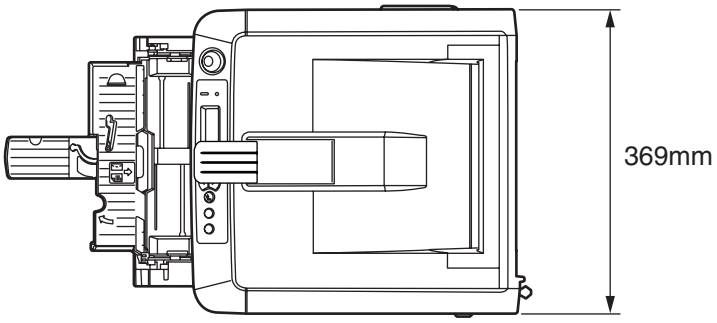
3) Paper handling
   Paper handling is simplified by the use of paper cassettes.

4) Ozone generation is restrained by carrying out primary electrification and transfer process by roller contact.

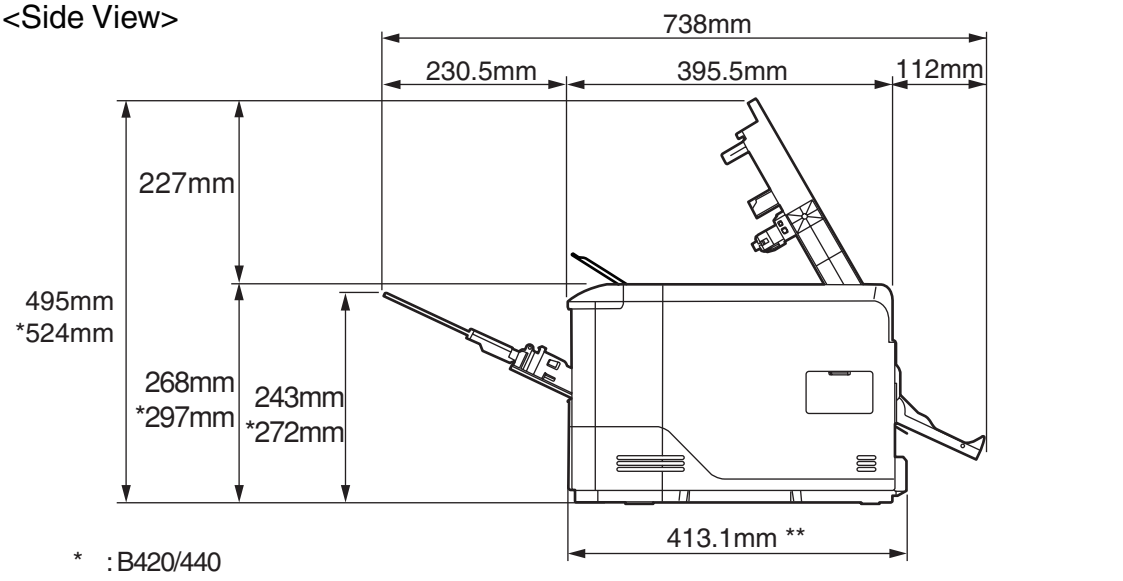
5) Auto duplex printing is supported.

1.3 External Dimensions

<Top View>



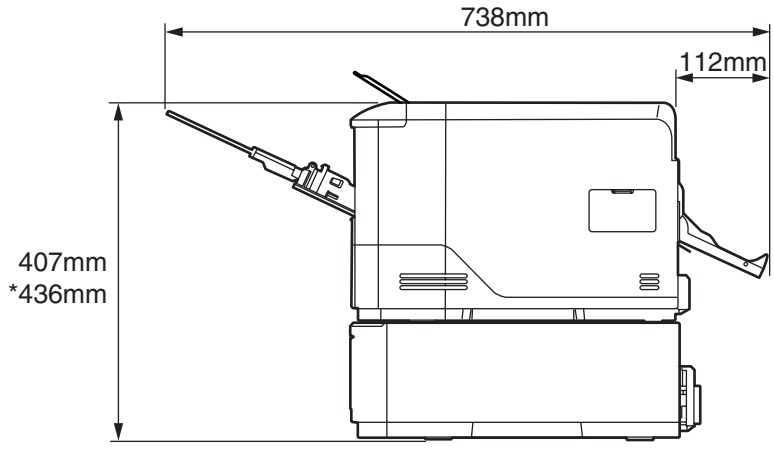
<Side View>



* : B420/440

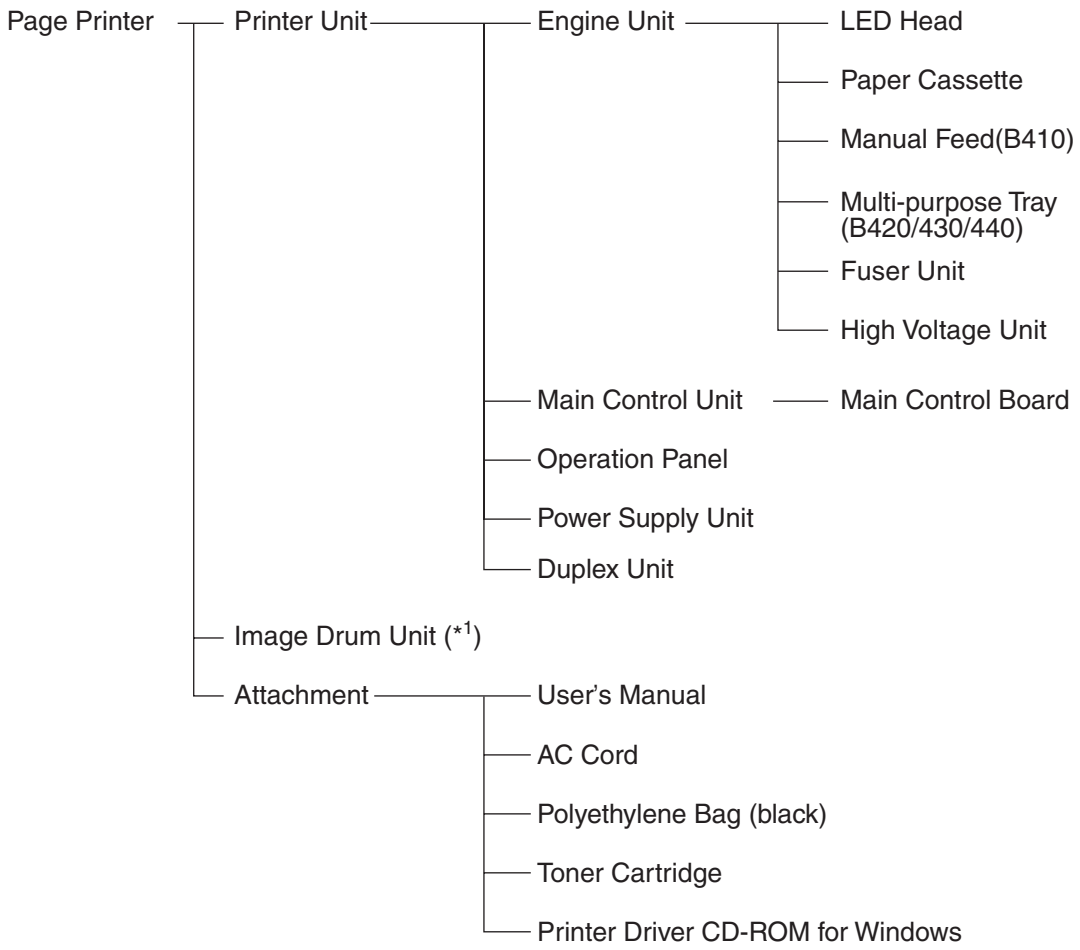
** : for use of Legal paper 471.7mm

<Additional Paper Feed Unit (Option) Installed>



2. CONFIGURATION

2.1 Standard Configuration



(*1) Put into the Printer unit.

2.2 Optional Configuration

Option	
1) Second Tray Unit	(with 530 sheet Universal Paper Cassette)
2) DDRAM DIMM	32MB,64MB,128MB,256MB

2.3 Consumables

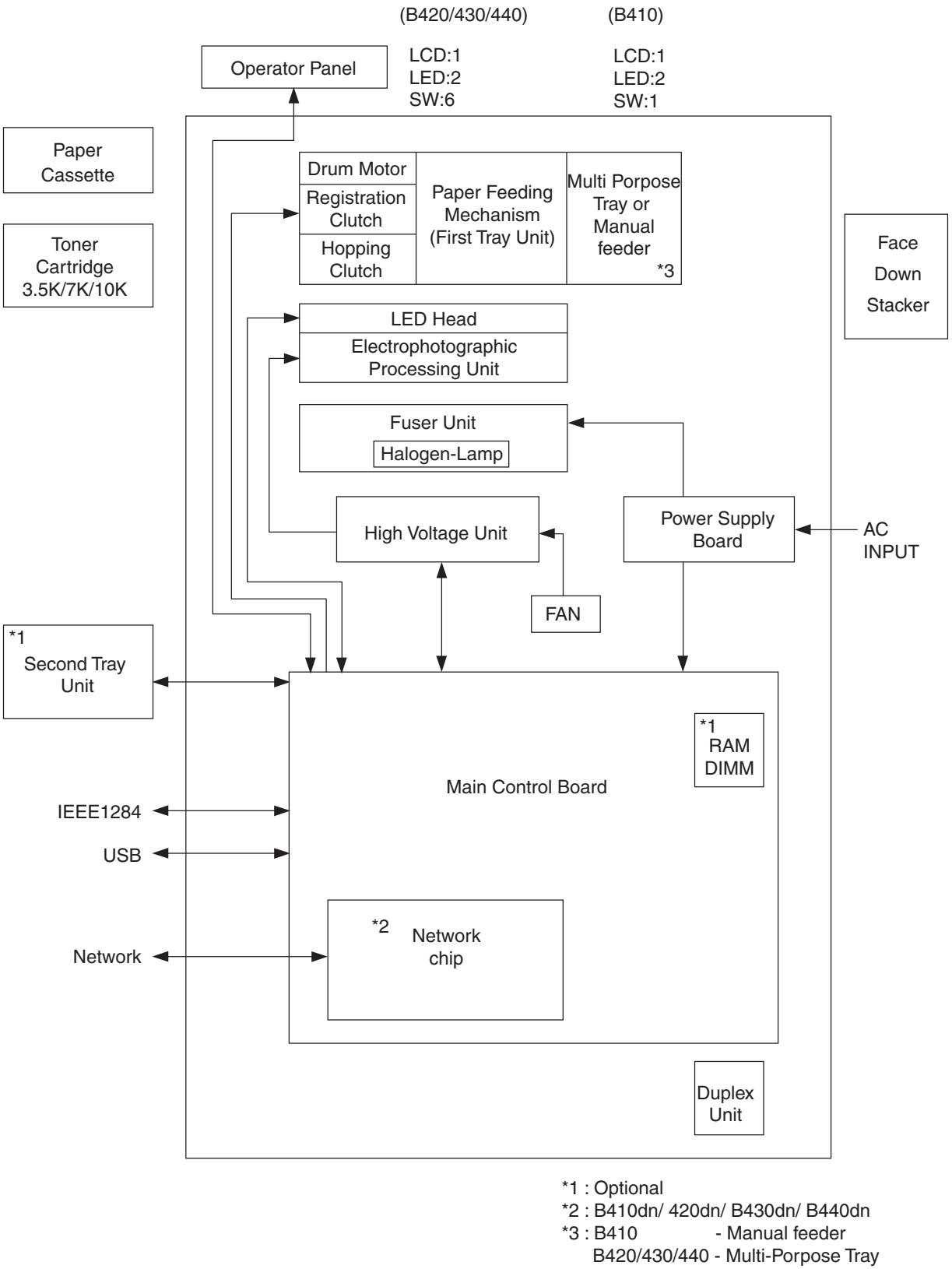
1) Toner cartridge kit : 3500, 7000, 10000

- Toner cartridge : 1 pc.
- LED lens cleaner : 1 pc. (ODA only)

2) Image drum cartridge

- Image drum cartridge: 1 pc.
- Light shield bag : 1 pc.

2.4 Block Diagram



*1 : Optional
*2 : B410dn/ 420dn/ B430dn/ B440dn
*3 : B410 - Manual feeder
B420/430/440 - Multi-Porpose Tray

3. SPECIFICATIONS

3.1 Printing Specifications

3.1.1 Printing method

Electrophotographic recording method

- Light source : Light Emitting Diode (LED) array
- Photosensitive body : Organic Photo-Conductor (OPC) drum
- Development method : Single-component, non-magnetic, dry development
- Fusing method : Heat roller fusing
- Resolution : (B410/420) 600 x 600 dpi, 600 x 1200 dpi, 600 x 2400 dpi (B430/440) 1200 x 1200dpi, 600 x600 dpi
- Printing Speed

Simplex printing

Tray	Media Weight	1200x1200, 600x600, 600x1200dpi		600x2400dpi	
		A4 size	Letter size	A4 size	Letter size
Standard Tray	Light~Medium	Approx. 28PPM	Approx. 30PPM	Approx. 14PPM	Approx. 15PPM
	M-Heavy	Approx. 23PPM	Approx. 24PPM	Approx. 14PPM	Approx. 15PPM
	Heavy	Approx. 19PPM	Approx. 20PPM	Approx. 14PPM	Approx. 15PPM
Second Tray	Light~Medium	Approx. 26PPM	Approx. 27PPM	Approx. 13PPM	Approx. 13PPM
	M-Heavy	Approx. 21PPM	Approx. 22PPM	Approx. 13PPM	Approx. 13PPM
	Heavy	Approx. 19PPM	Approx. 20PPM	Approx. 13PPM	Approx. 13PPM
Multi-purpose Tray	Light~Medium	Approx. 23PPM	Approx. 24PPM	-	-
	M-Heavy	Approx. 19PPM	Approx. 20PPM	-	-
	Heavy	Approx. 19PPM	Approx. 20PPM	-	-

Duplex printing

Tray	Media Weight	1200x1200, 600x600, 600x1200dpi		600x2400dpi	
		A4 size	Letter size	A4 size	Letter size
Standard Tray	Light~Medium	Approx. 14PPM	Approx. 14PPM	Approx. 7PPM	Approx. 7PPM
	M-Heavy	Approx. 11PPM	Approx. 11PPM	Approx. 7PPM	Approx. 7PPM
	Heavy	Approx. 11PPM	Approx. 11PPM	Approx. 7PPM	Approx. 7PPM
Second Tray	Light~Medium	Approx. 13PPM	Approx. 14PPM	Approx. 7PPM	Approx. 7PPM
	M-Heavy	Approx. 11PPM	Approx. 11PPM	Approx. 7PPM	Approx. 7PPM
	Heavy	Approx. 11PPM	Approx. 11PPM	Approx. 7PPM	Approx. 7PPM
Multi-purpose Tray	Light~Medium	Approx. 13PPM	Approx. 14PPM	-	-
	M-Heavy	Approx. 11PPM	Approx. 11PPM	-	-
	Heavy	Approx. 11PPM	Approx. 11PPM	-	-

- Warm-up time : Except for Power ON initializing time
  25 seconds typical at room temperature [71.6˚F (22˚C), AC 120/230 V].
- First page print time :
  5.4 seconds typical for the Letter size paper (5.5 seconds typical for A4 size) after warm-up.

3.2 Electrical Specifications

- Input power supply : 110-127 ±10%
  220-240 ±10%
- Power frequency : 50/60 Hz ±2Hz
- Power consumption (with full option)

		115VAC	230VAC
:	Power save mode(with full option)	Approx. 7W	Approx. 7W
	Power save mode(without option)	Approx. 6W	Approx. 6W
	Idle	Approx.70W	Approx. 70W
	Typical operation	Approx.450W	Approx. 450W
	Peak	800W	800W

3.3 Physical Specifications

- Dimensions
  See Model list (Page 7)

- Paper capacity
  Paper cassette : See Model list (P7)
  Face-down stacker : 150 sheets (20lb paper) (Standard paper max)
  Face-up stacker : N/A (face-up exit available)
  (Numbers of sheets are approximate values.)

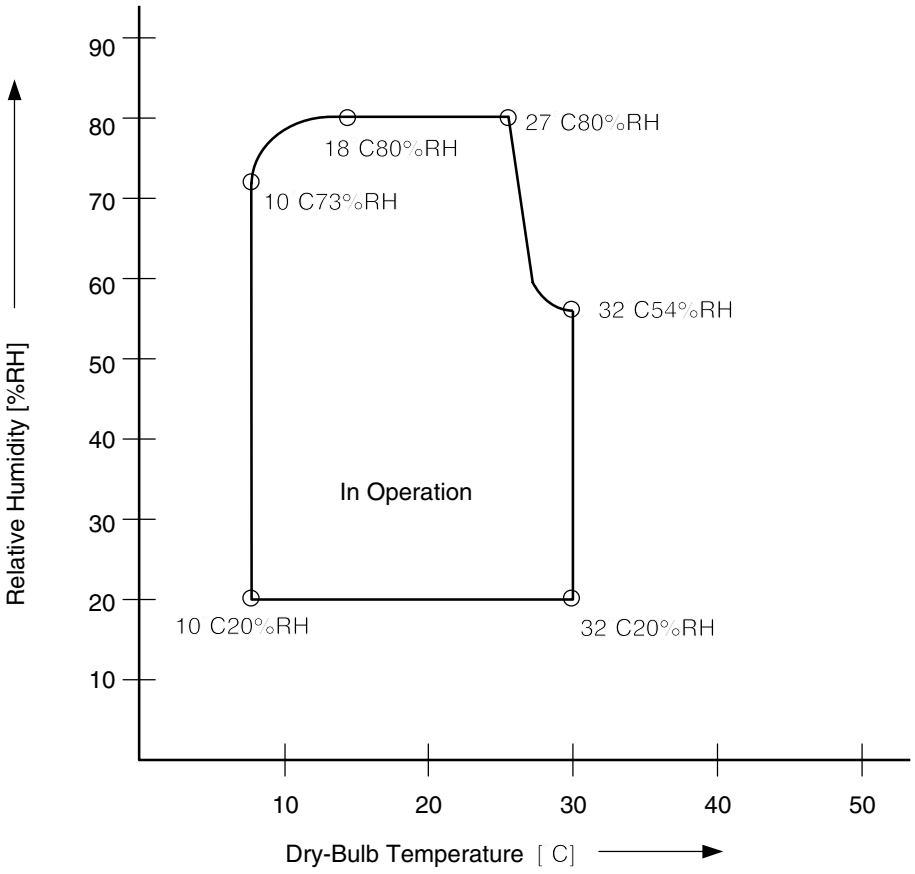
- Weight
  Printer : Approx. 24 lbs (11 kg)

3.4 Environmental Conditions

3.4.1 Temperature and humidity

	In operation	Power off mode	During Storage	Unit
Temperature	50-90 (10-32)	32-110 (0-43)	14-110 (-10-43)	°F (C)
Humidity	20-80	10-90	10-90	%RH
Maximum wet bulb temperature	77 (25)	80.4 (26.8)		°F (C)
Minimum difference between wet and dry bulb temperatures	35.6 (2)	35.6 (2)		°F (C)

1. Storage conditions specified above apply to printers in packed condition.
2. Temperature and humidity must be in the range where no condensation occurs.
3. The image drum cartridge and the toner cartridge are warranted for a period of one year from the date of delivery against defective material or workmanship.
4. Delivery of the machine in hot areas (43˚C (100˚F) or higher) should be one month or shorter.



3.4.2 Installation conditions

- The printer shall be installed horizontally, with no more than 1 degree of inclination.
- The printer can be used at the altitude of up to 8202 ft (2500 m).
- Illumination shall be 2,000 lux max. within 5 min.

3.4.3 Impact

3 G max. while the printer is in package.

3.4.4 Vibration

	In operation	While waiting	When being packed
5~10Hz	0.1mm (0.004")	2.54mm (0.1")	10.16mm (0.4")
10~14Hz	0.02G	0.5G	2.0G
14~54Hz	0.05mm (0.002")	0.25mm (0.001")	0.38mm (0.015")
54~200Hz	0.3G	1.5G	5.0G

3.4.5 Storage Conditions (packed in the packing material)

Max alteration : 15 ˚C /hour, 15%RH/hour - No dewing shall remain.
Storage Altitude : Up to 10,000 Meters

Machine (without supplies):
Temperature : -10 ˚C to 43 ˚C (-14 ˚F to 109.4 ˚F)
Relative Humidity : 10% to 90% RH
* Maximum wet bulb temperature: 35 ˚C
Period : 1 year

Machine (with supplies - toner /image drum):
Temperature : -10 ˚C to 43 ˚C (-14 ˚F to 109.4 ˚F)
Relative Humidity : 10% to 90% RH
* Maximum wet bulb temperature: 35 ˚C
Period : 1 year

3.4.6 Transport Conditions (packed in the packing material)

Max alteration : 15 ˚C /hour, 15%RH/hour - No dewing shall remain.

Machine (with supplies) and supplies:
Temperature : -29 ˚C to 50 ˚C (-20 ˚F to 122 ˚F)
Relative Humidity : 10% to 90% RH
* Maximum wet bulb temperature : 40 ˚C
Period : 1 month

3.4.7 Corrosion

The machine will be constructed of materials, which result in acceptable machine performance and life in the normal office environment.

3.4.8 Paper Specifications

(1) Paper types

- Standard paper

  XEROX 4200 (20 lb) letter size

- Ordinary paper

  16 to 28 lb(60 to 105g/m^2) - Automatic feed (Standerd cassette)
  16 to 43 lb(60 to 160g/m^2) - Manual feed, Multi-Purpose feed
  (* Set a media type Envelope for 32 to 43 lb.)

- Special media (face-up, manual feeding)

  Labels
  Envelopes [24 to 28 lb (90 to 105g/m^2)]
  Recomendation Envelope : Redi-Strip 24 lb (QUALITY PARK Products.)
  Thermal resistance transparencies for Over Head Projector (OHP)
  (Except OHP for color photocopiers and color laser printer.)
  Recomendation OHP : CG3300 (3M)

(2) Paper size

1) Standard size

Paper	Paper Size
Letter	8.50" x 11.00"
Legal 13	8.50" x 13.00"
Legal 14	8.50" x 14.00"
Executive	7.25" x 10.5"
Monarch Envelope	3.87" x 7.50"
COM-9 Envelope	3.87" x 8.87"
COM-10 Envelope	4.12" x 9.50"
DL Envelope	4.33" x 8.66"
C5 Envelope	6.38" x 9.02"
A4	8.27" x 11.69"
A5	5.83" x 8.27"
B5 (JIS)	7.17" x 10.12"
A6	4.13" x 5.83"
Statement	5.50" x 8.50"
C6	4.49" x 6.38"

2) Free size
- Width : 3.4" ~ 8.5" (86 ~ 216 mm)
- Length: 5.5" ~ 14" (140 ~ 355.6 mm)

(3) Specification

Acid Content	5.5 pH minimum
Ash Content	Not to exceed 10%
Basis Weight	Paper cassette: 16 to 28 pound (60 to 105 g/m^2) Manual feed slot: 16 to 32 pound (60 to 120 g/m^2)
Brightness	83% minimum
Caliper	.003 to .008 in. (0.076 to 0.15mm)
Curl	In-ream: flat within 0.4 in. (10mm) (TBD)
Cut Edge Conditions	Cut with sharp blades, no visible fray.
Finishing	Cut sheet to within ±0.3 inch (±0.8mm) of nominal. ±0.20° square.
Furnish (Composition)	100% chemical wood pulp and/or cotton fiber
Fusing Compatibility	Must not scorch, melt, offset, or release hazardous emissions when heated to 392°F (200 C) for 0.1 second.
Grain	Long grain
Moisture Content	4% to 6% by weight
Opacity	85% minimum
Packaging	Polylaminated moisture-proof ream wrap.
Smoothness	100 to 250 (Sheffield)
Stiffness	1.6 minimum machine direction, 0.6 minimum cross direction (Taber)
Wax Pick	12 minimum (Dennison)

3.4.9 Paper feeding

- Paper feeding method : Automatic paper feeding and single-sheet manual paper feeding for special paper.

- Paper feeding capacity :

Standard Tray	:	See model list.
Second tray Unit	:	530 sheets/20 lb max. (Letter size)
Multi-purpose tray	:	50 sheets/20 lb max. (Letter size) 10 envelopes

(Numbers of sheets are approximate values.)

- Paper size

a) For automatic paper feeding :

• Standard cassette	:	Legal14, Legal13, Letter, Executive, Statement, A4, A5, B5,
• Second tray Unit	:	Legal14, Legal13, Letter, Executive, A4, A5, B5
• Multi-purpose tray (B420/B430/B440)	:	Letter, Executive, A4, A5, B5, A6, COM9, COM10, Monarch, DL, C5, C6, Statement, Legal 13, Legal 14, OHP
• Auto Duplex	:	Legal 14, Legal 13, Letter, A4

b) For manual paper feeding :

• Single-sheet feeder (B410)	:	Letter, Executive, A4, A5, B5, A6, COM9, COM10, Monarch, DL, C5, C6, Statement, Legal 13, Legal 14, OHP

- Datum line for paper feeding : The center line in the direction of the paper feeding, for each size of paper

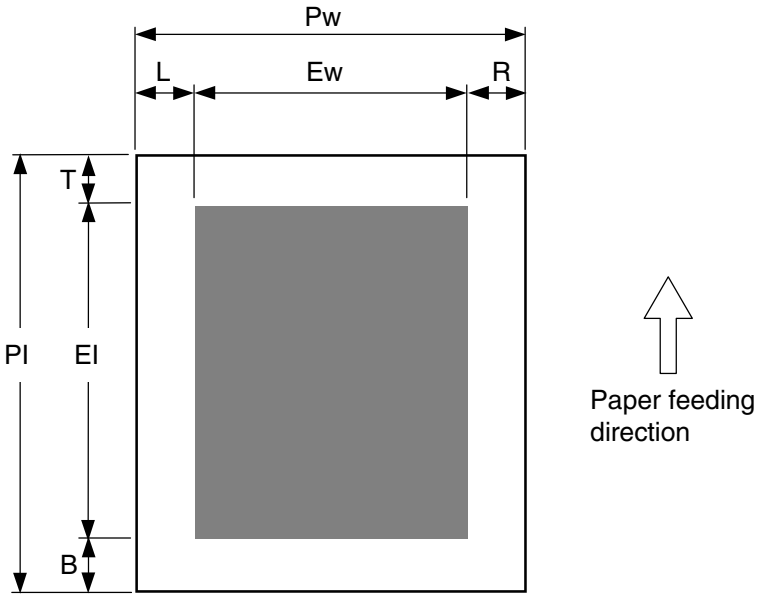
3.4.10 Paper stacking

- Stacking method : Face-down
- Stacking capacity : See page 13.

3.4.11 Print quality

- Print quality is prescribed by print quality spec. 44019401ZZ.

3.4.12 Printable area



: Shaded region represents printable area.

(300DPIMode)

		Letter size			Legal size			Executive size		
		inch	mm	Dots	inch	mm	Dots	inch	mm	Dots
Paper length	Pl	11.0	279.4	3300	14.0	335.6	4200	10.5	266.7	3150
Paper width	Pw	8.5	215.9	2550	8.5	215.9	2550	7.25	184.2	2175
Effective printing area length	El	10.5	270.94	3200	13.5	327.14	4100	10	258.24	3050
Effective printing area width	Ew	8.0	203.2	2400	8.0	203.2	2400	6.75	171. 5	2025
Top margin	T	1/ 6 (*0.25)	4.23	50	1/6 (*0.25)	4.23	50	1/6 (*0.25)	4.23	50
Bottom margin	B	1/ 6 (*0.25)	4.23	50	1/6 (*0.25)	4.23	50	1/6 (*0.25)	4.23	50
Left margin	L	1/ 6 (*0.25)	4.23	50	1/6 (*0.25)	4.23	50	1/6 (*0.25)	4.23	50
Right margin	R	1/ 6 (*0.25)	4.23	50	1/6 (*0.25)	4.23	50	1/6 (*0.25)	4.23	50

Note: *guaranteed printable area

Dots: 600 dpi mode = 300 dpi mode x 2

3.5 Interface Specifications

3.5.1 Centronics parallel interface

1) Connector
   - Printer side : 36-pin receptacle
     (single port) Type 57-40360-12-D56 (made by Daiichi Denshi) or equivalent
   - Cable side : 36-pin plug
     Type 57-30360 (made by Daiichi Denshi) or equivalent
     Plug-552274-1 (AMP), 552073-1 (AMP) or equivalent

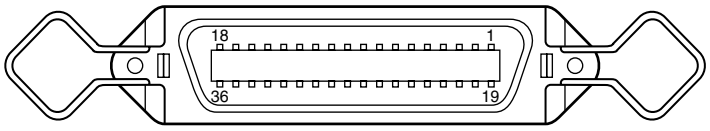
2) Cable
   - Cable length : 6 ft (1.8 m) max.
     (IEEE std 1284-1994 compliant is recommended for noise prevention)

   Note: Cable is not provided.

3) Table of parallel I/F signals

Pin No.	Signal name	Signal direction	Compatible	Nibble	ECP
1	$\overline{\text{DATA STROBE}}$	→ PR	nStrobe	HostClk	
2~9	DATA BIT-n	↔ PR	Data 1 (LSB) ~ Data 8 (MSB)		
10	$\overline{\text{ACKNOWLEDGE}}$	← PR	nAck	PtrClk	PeriphClk
11	BUSY	← PR	Busy	PtrBusy	PeriphAck
12	PAPER END	← PR	PError	AckDataReq	nAckReverse
13	SELECT	← PR	Select	Xfalg	
14	$\overline{\text{AUTO FEED}}$	→ PR	nAutoFd	HostBusy	HostAck
15	–	–	–		
16	0V	–	Logic Gnd		
17	CHASSIS GROUND	–	Chassis Gnd		
18	Hi Level	← PR	Pulled up to +5V thrangh 3.3 Kchm		
19	0V	–	Signal Ground (nStrobe)		
20~27	0V	–	Signal Ground (Data 1 ~ Data 8)		
28	0V	–	Signal Ground (PError, Select, nAck)		
29	0V	–	Signal Ground (Busy, nFalut)		
30	0V	–	Signal Ground (nAutoFd, nSelectln, nFalt)		
31	$\overline{\text{INPUT PRIME}}$	→ PR	nInit		nReverseRequest
32	$\overline{\text{FAULT}}$	← PR	nFault	nDataAvail	nPeriphRequest
33	0V	–	–		
34	–	–	–		
35	Hi Level	← PR	Pulled up to +5V through 3.3kohm		
36	$\overline{\text{SEL-IN}}$	→ PR	nSelectln	IEEE1284active	

- Connector pin arrangement



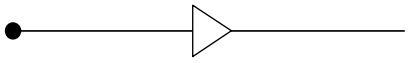
4) Signal level

- INPUT
  Low : 0 V to +0.4 V
  High : +2.4 V to 5.0 V

- OUTPUT
  Low : 0 V to +0.4 V
  High : +2.0 V to 5.0 V

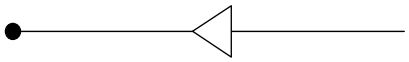
5) Interface circuit

a) Receiving circuit



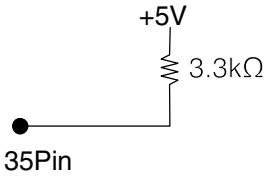
LVC161284

b) Sending circuit



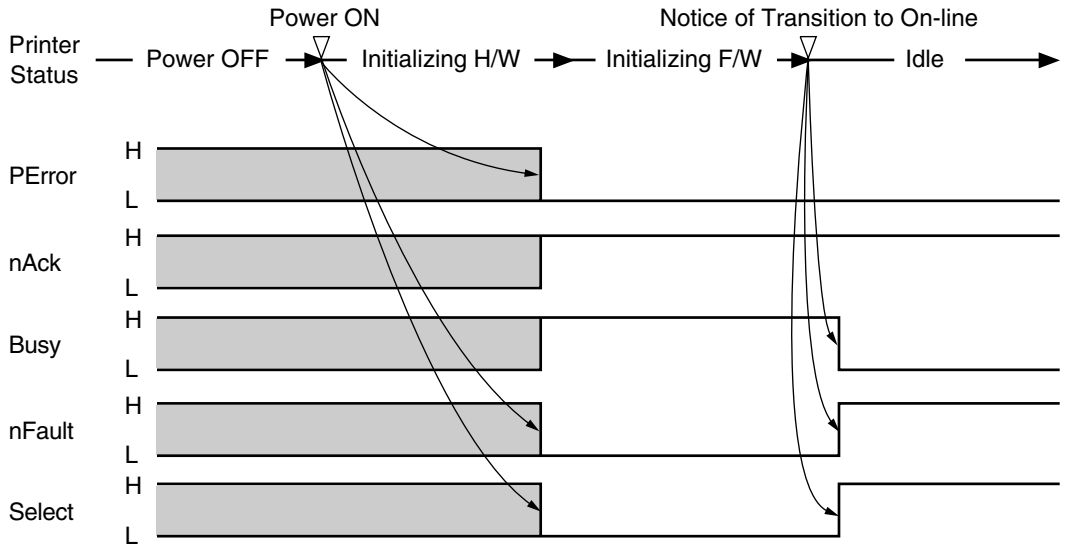
LVC161284

c) Other

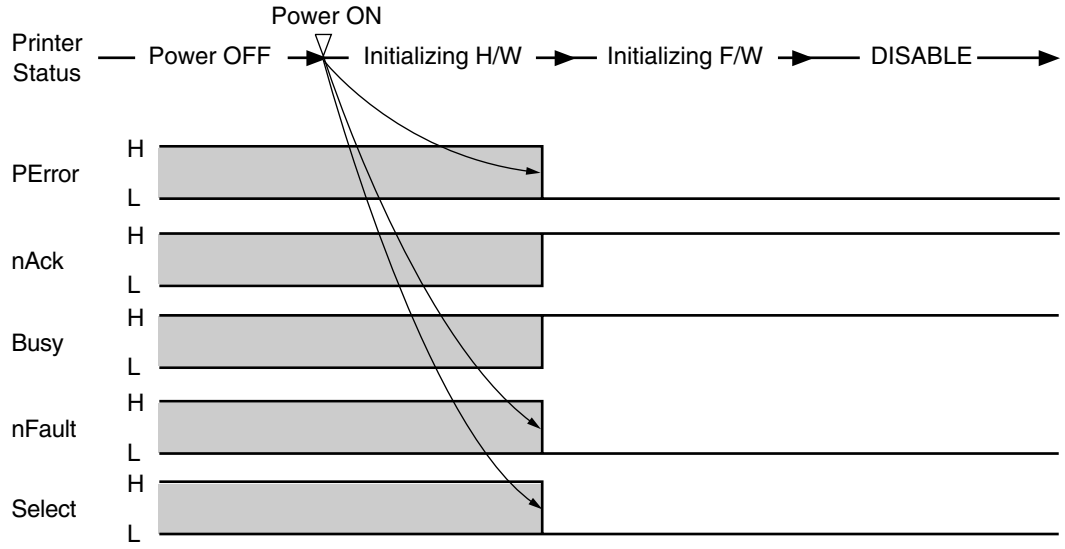


6) Timing charts

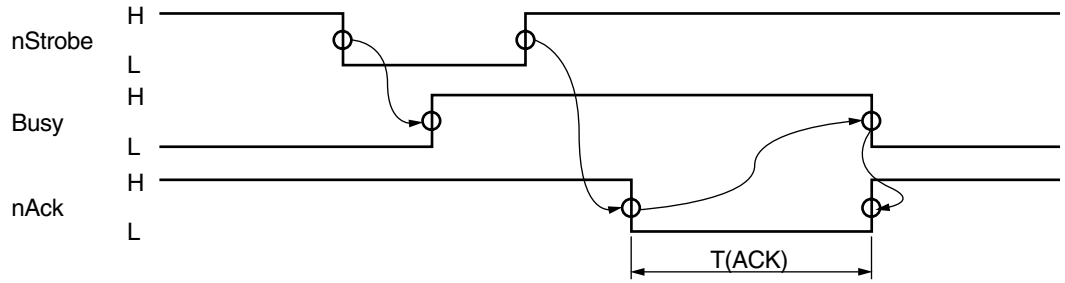
a) Power-ON (Menu Setting: PARALLEL=ENABLE)



b) Power-ON (Menu Setting: PARALLEL=DISABLE)

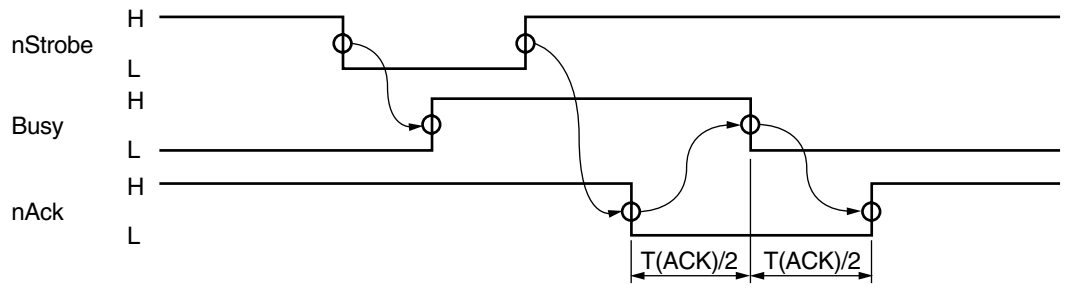


c) Data Reception (Menu Setting: Ack/Busy Timing=Ack in Busy)



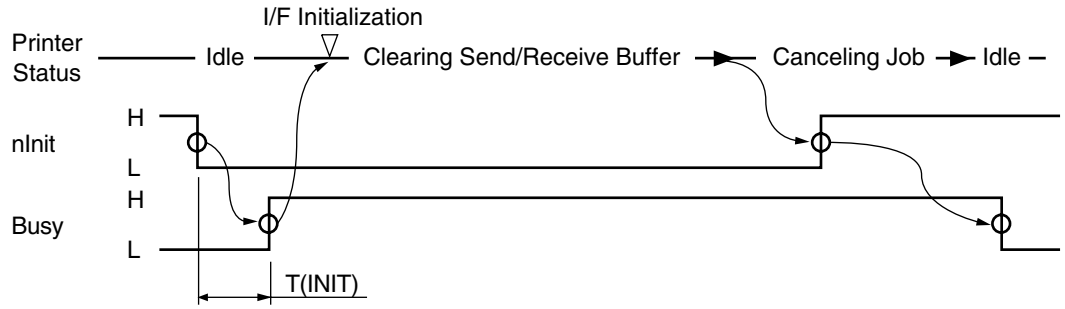
Menu Setting (Ack Width)	NARROW	MEDIUM	WIDE
T(ACK)	0.5µs	1.0µs	3.0µs

d) Data Reception (Menu Setting: Ack/Busy Timing=Ack while Busy)



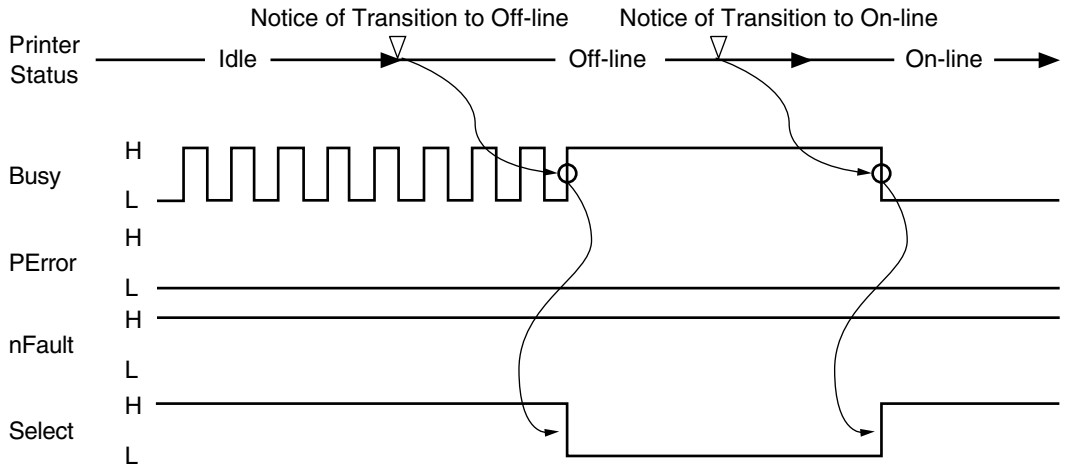
* The T (ACK) values are the same as those shown in the section c).

e) I-Prime (Not at menu-set I-PRIME=DISABLE)

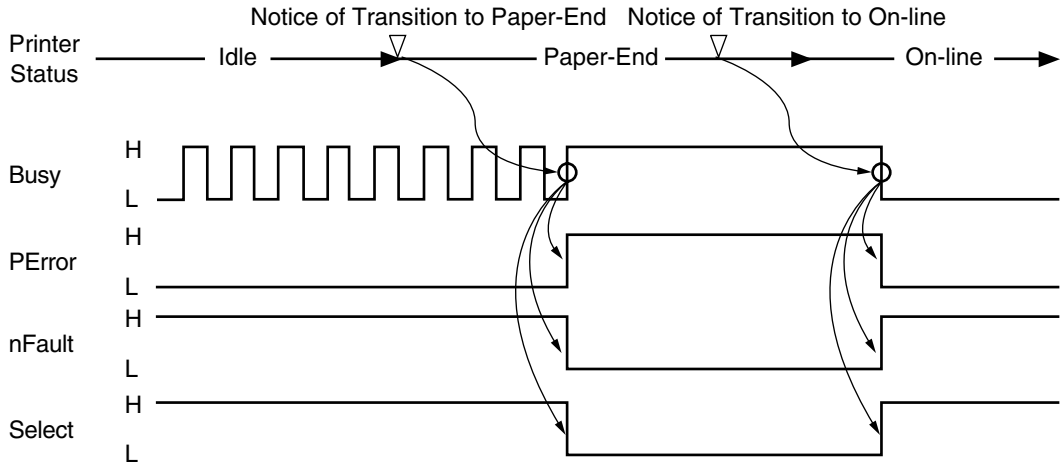


Menu Setting (I-PRIME)	3 MICRON SEC	50 MICRON SEC
T(INIT)	2.0µs	33.3µs

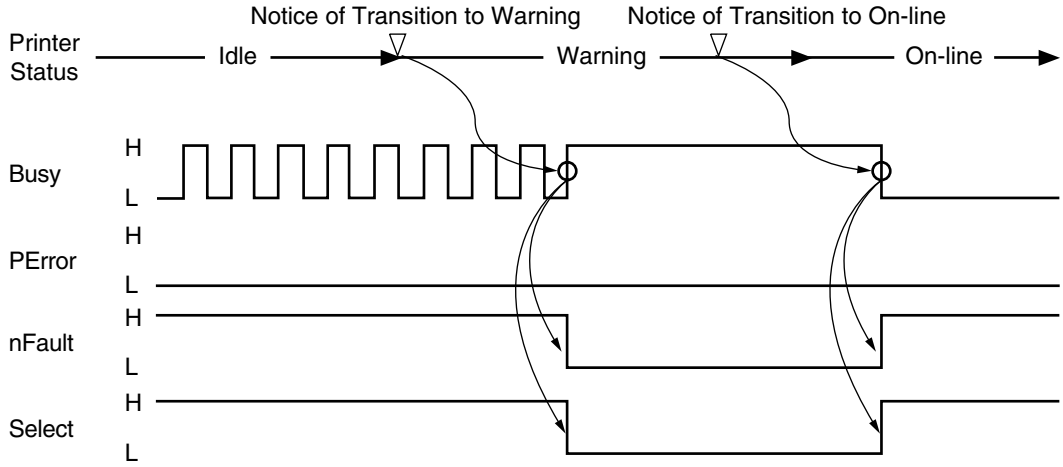
f) Off-line



g) Paper-End



h) Warning (Paper-end state is excluded)



7) IEEE1284
Support Mode: Compatible, Nibble, ECP

3.5.2 Universal Serial Bus (USB)

High Speed USB 2.0.

1) Connector

- Printer Side : “B” Receptacle (Upstream Input to the USB Device)
- Cable Side : Series “B” Plug

2) Cable (High Speed USB 2.0)

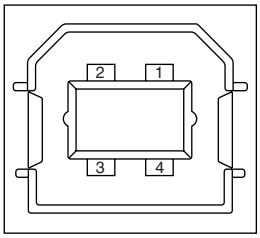
- Cable Length : Max 2 m (Shieled Cable)

Note: Cable is not provided.

3) Table of USB I / F signals

Contact Number	Signal Name
1	Vbus
2	D-
3	D+
4	GND
Shell	Shield

4) Connector pin arrangement



5) Power distribution

- Self - powered Device

6) Data Signaling Rate

- Full - speed function - Max. 12.000Mb/s ±0.25%
- High - speed function - Max. 480.00Mb/s ±0.05%

3.5.3 Network Interface (B410dn, B420dn, B430dn, B440dn)

1) Connector

- 8-pin modular jack (RJ-45)

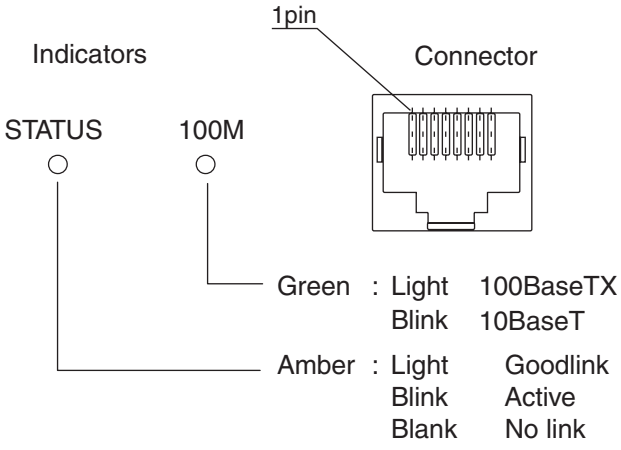
2) Cable

- 10BaseT/100BaseTX (Category5 cable, with male RJ45 connector, unshield twisted pair, required)

3) Signal

Contact	MDI signal
1	TD+
2	TD-
3	RD+
4	Not used
5	Not used
6	RD-
7	Not used
8	Not used

4) Appearance



5) Physical layer

a) Transmission method by CSMA/CD
10BaseT/100BaseTX (Full/Half duplex)

b) Transmission protocol

Packet type	Support	Remarks
Ethernrt II	○	
IEEE802.3	○	
IEEE802.3+IEEE802.2	○	
IEEE802.3+IEEE802.2+SNAP	○	

6) List of protocols

Protocol	Print	Configuration	Etc.
TCP/IP	LPR IPP FTP SMTP HTTP(Except IPP)	HTTP Telnet FTP NetBEUI SNMP DHCP/BOOTP AutoIP DNS UPnP SLP	TCP, IP, ICMP, ARP UDP, IPv6, LLTD, Windows Rally
NetBEUI	SMB, CIFS	WINS	NetBIOS
NetWare	Q-Server over IPX Q-Server over IP R-Printer N-Printer	NCP SNMP	SPX, IPX, SAP, RIP
EtherTalk	PAP	NBP	ELAP, AARP, DDP, AEP, ZIP, RTMP, ATP
EAP (B420/B430/B440)			EAP-TLS,PEAP

7) TCP/IP

a) Support OS

SunOS 4.1.1, SunOS 4.1.2, SunOS 4.1.3
Solaris 2.1, Solaris 2.2, Solaris2.4, Solaris2.5
HP-UX 9.X
Windows3.0+TCP/IP
Windows3.1+TCP/IP
Windows3.11+TCP/IP
Windows95
WindowsNT 3.5+TCP/IP
WindowsNT 3.5.1
WindowsNT 4.0
Windows98
WindowsME
Windows2000
WindowsXP

b) LPR

The LPR is an application to process the print data. The LPR of this system supports multiple clients. Furthermore, it provides multiple connections for one client.

Item	Factory default	Setup range	Description
Number of clients connected		1 to 8 clients	indicates the number of clients which can be connected simultaneously. Allows simultaneous connection of a maximum off our clients.

First command character	LPR option	Objective	Support
H	Specify by default.	Host name of the machine to which the LPR is called. Host name printed on the banner sheet	○
P	Specify by default.	Log-in name of the user having called the LPR. User name printed on the banner sheet	○
J	Specify by -J option.	Job name printed on the banner sheet Default: File name	○
C	Specify by -C option.	Job type printed on the banner sheet Default: System name	○
L	Specify by default. Cancel the specification by -h option.	Specify literal banner sheet printing.	○
f	Specify the number of volumes by -# option.	Name of the data file to be printed. The number of character strings of this command varies according to the number of volumes. (Not supported)	○
U	Specify by default.	Name of the file to be deleted with completion of printing	
I	Specify by -i option.	Number of indent characters in the output line	
W	Specify by -w option.	Specify page width.	
M	Specify by -m option.	Specify sending of a mail with completion of printing.	
S	Specify by -s option.	Specify the symbolic link to the data file.	○
1/2/3/4	Specify by -1/-2/-3/-4 options.	Specify the font.	

c) FTP
FTP is an application to process the print data. The FTP of this system supports multiple of clients. Furthermore, it provides multiple connections for one client.

Item	Factory default	Setup range	Description
Number of clients connected		1 to 8 servers	Indicates the number of clients which can be connected simultaneously. Allows simultaneous connection of a maximum of four clients.

d) Telnet
Telnet is an application to reference and change the menu of the Network/Printer. The TELNET of this system supports simultaneous connection of multiple clients for the personal user. Furthermore, it provides multiple connections for one client. But it cannot provide two or more simultaneous connections for super users.

Item	Factory default	Setup range	Description
Number of connected clients		1 clients	Indicates the number of clients which can be connected simultaneously. Allows simultaneous connection of a maximum of four clients.
Terminal mode	VT-100	VT-100	Indicates the control mode of the terminal of the connected client. Only the VT-100 alone is the support terminal mode.
Number of columns	80 columns	80 columns	Indicates the number of the digits of the terminal of the connected client. The number of the support digits is fixed at 80.
Number of rows	25 rows	25 rows	Indicates the number of the digits of the terminal of the connected client. The number of the support digits is fixed at 25.
Expiration of idle time	300 sec.	60 to 7200 sec.	Indicates the time when the idle time of the connected clients expires.

e) HTTP
The HTTP is an application to reference and change the menu of the Network/Printer. The HTTP of this system supports simultaneous connection of multiple clients for the personal user. Furthermore, it provides multiple connections for one client.

Item	Factory default	Setup range	Description
HTTP Version	1.0	1.0	ndicates the version of the HTTP being implemented.

f) SNMP
SNMP is an application to reference and change the menu of the Network/Printer. The SNMP of this system supports simultaneous connection of multiple clients for the personal user. Furthermore, it provides multiple connections for one client.

8) Netware

a) Support OS
Netware File Server 2.2C, 3.X 4.0, 4.1 (Bindery Model/ partly NDS support)

b) R-printer
The R-printer is an application to process the print data. The R-printer of this system supports multiple print serves. Furthermore, it provides one connection for one printer server; it does not allow multiple connections for one printer server.

Item	Factory default	Setup range	Description
Number of connected print serves		1 to 8 servers	Indicates the number of print servers which can be connected simultaneously. Each print server need not be started in advance. Even when the printer is ready for operation, connection is achieved only by starting the print server.
Print Server Name	OIxxxxxx Etherxxxxxx	Maximum four servers*Maximum 31 characters	Indicates the name of the connected print server. Each print server name can be registered up to a maximum of 31 characters.The default xxxxxx of the print server name is set to the lower three bytes of the MAC address of the print server. Overseas: OIxxxxxx OEM: Etherxxxxxx The print server name must be preset on a NetWare server using a Novell tool.
Printer Name	(Print Server Name)-prn1		Takes the form of the above server name followed by -prn1, by default.
Job Time out	10	4-255 seconds	A timeout value that functions only when a specific size job is received.

c) Q-Server
The Q-Server is an application to process the print data. The Q-Server of this system supports multiple file serves. Furthermore, it allows connection of multiple print servers for one file server.

Item	Factory default	Setup range	Description
Number of connected print serves		1 to 8 servers	Indicates the number of print servers which can be connected simultaneously. Each print server need not be started in advance. Even when the printer is ready for operation, connection is achieved only by starting the print server.
Print Server Name	OIxxxxxx Etherxxxxxx	Maximum four servers *Maximum 31 characters	Indicates the name of the connected print server. Each print server name can be registered up to a maximum of 31 characters.The default xxxxxx of the print server name is set to the lower three bytes of the MAC address of the print server. Overseas: OIxxxxxx OEM: Etherxxxxxx The print server name must be preset on a NetWare server using a Novell tool.
Printer Name	(Print Server Name)-prn1		Takes the form of the above server name followed by -prn1, by default.
File Server Name	NULL	Maximum four servers *Maximum 47 characters	Entered with the name of a connecting file server. The file server is that whose settings have been set using a Novell tool. The entry of this file server name is optional. When the field is left blank, SoftNIC can automatically discover and connect a file server to connect to.
Password for File servers	NULL	Maximum 31 characters	Entered with a password for the connection to a file server. The password must be preset on a NetWare server using a Novell tool. When this field, which is optional, is left blank, no password is used for connection to a file server. In such cases, the password for the file server must not be set on the file server.
Job Polling Rate	4	2-255 seconds	Specified with a time interval for checking whether a job occurs. When this field, which is optional, is left blank, the default four seconds takes effect.

9) EtherTalk

a) Support OS
System7.0, 7.1, 7.1.X
System7.5, 7.5.1, 7.5.2, 7.5.3, 7.5.5
MAC OS7.6
MAC OS 10.2, 10.3

b) PAP
The PAP is an application to process the print data.

Item	Factory default	Setup range	Description
Number of connected clients	1 client	1 client	Indicates the number of clients which can be connected simultaneously. Simultaneous connection is possible up to one client.
Printer name	B430/B440/MLPCL7	One item by max. 32 characters	Indicates the printer name which can be set on the printer. Indicates the zone to which the printer belongs.
Zone name		One item by max. 32 characters	

10) JetAdmin Support switch (ON/OFF)

If this switch is off this printer cannot be discovered by JetAdmin.

11) Others

a) Hot Protocol
The Hot Protocol provides a function of simultaneous meeting of requests for connection from multiple clients using different transport layer protocols.

b) Multi-user
The Multi-user provides a function of simultaneous meeting of requests for connection from multiple clients using the same transport layer protocol.

c) Permissible connection

	Number of connections	Remarks
Total number of connections	16	
Number of connections for simultaneous use of management APs (Telnet, SNMP, Web)	2	
Number of connections for simultaneous use of printing APs	8	

12) Setup

Each setup item can be set by the menu and network management tool.

Classification	Setup item	Menu change	Management tool change	Description
Common	Network valid/invalid	○	○	Valid/invalid for entire network
	Frame type	○	○	Frame type for transmission and reception
TCP/IP	TCP/IP valid/invalid	○	○	TCP/IP valid/invalid
	IP address	○	○	
	IP subnet mask	○	○	
	Default gateway	○	○	
Netware	Netware valid/invalid	○	○	Netware valid/invalid
	Netware mode	X	○	R-Printer/Q-server
	Network address	X	X	
	Q-server print server name	X	○	
	Q-server connection file	X	○	
	server name	X	○	
	Q-server polling rate	X	○	
	R-Printer printer name	X	○	
	R-Printer connection print server name	X	○	
AppleTalk	EtherTalk valid/invalid	○	○	EtherTalk valid/invalid
	printer name	X	X	
	EtherTalk zone name	X	X	Name of the zone to which the printer belongs

Network menu reset is performed by operater panel.

3.6 Safety

3.6.1 Safety & EMC

<table>
<tr><td>AC INPUT</td><td colspan="2">110-127V</td><td colspan="4">220-240V</td></tr>
<tr><td rowspan="2">Destination</td><td rowspan="2">ODA</td><td rowspan="2">TAIWAN</td><td rowspan="2">OEL
Notes)</td><td rowspan="2">ODA
Notes)</td><td colspan="3">AOS</td></tr>
<tr><td>Singapore
Notes)</td><td>China</td><td>Korea</td></tr>
<tr><td>Safety</td><td>UL60950-1
CSA C22.2
No.60950-1</td><td rowspan="3">BSMI
(NBC)</td><td colspan="2">EN60950-1
(CE & GS mark)</td><td>PSB
(NBC)</td><td rowspan="3">CCC
(NBC)</td><td rowspan="3">EK
(NBC)

MIC
equivalent
level
(NBC)</td></tr>
<tr><td>EMC</td><td>CE
equivalent
level</td><td colspan="2">EN61000-3-2/Class A
EN61000-3-3
EN55024</td><td>-</td></tr>
<tr><td>EMI</td><td>FCC Part15
Class B</td><td>EN55022
Class B</td><td>FCC Part15
Class A</td><td>SS IEC
CISPR22</td></tr>
</table>

Notes) Singapore, Australia, New Zealand, Central America, Africa etc. : each applies in each selling company.

3.6.2 Acoustic Noise

1) Noise measuring method
   Noise is measured in accordance to ANSI (SI29-1979). The microphone is placed at the operator's position, 3.28 ft (1 m) from the printer.

2) Noise
   - In operation : 53 dBA or less
   - In standby mode : 30 dBA or less [Except Idling Operation]
     (Meansured at the front of each printer without option tray)
   - In power saving mode : Back ground level

3.6.3 Toner toxicity

- Contains no carcinogen.

3.7 Toner Specifications

1) Toner cartridge (TypeB1) : For first cartridge that comes with the printer
Approx. 1,500 sheets with ISO/IEC 19752 print pattern
3.5K cartridge
3,500 sheets with ISO/IEC 19752 print pattern
In the case of a combination with a new Image Drum Cartridge ,
1,750 sheets with ISO/IEC 19752 print pattern
7K cartridge
7,000 sheets with ISO/IEC 19752 print pattern
In the case of a combination with a new Image Drum Cartridge,
5,250 sheets with ISO/IEC 19752 print pattern
10K cartridge
10,000 sheets with ISO/IEC 19752 print pattern
In the case of a combination with a new Image Drum Cartridge ,
8,250 sheets with ISO/IEC 19752 print pattern

3.8 Image Drum Cartridge Specifications

1) Image drum cartridge (TypeB1) : Simplex printing :(A4 size paper)
Up to 25,000 sheets for continuous printing.
Approx. 20,000 sheets for 3 page per job without power save.
Approx. 12,000 sheets for 1 page per job without power save.
Up to 7,000 sheets for 1 page per job with power save(Minimum).

Duplex printing :(A4 size paper)
Approx. 7,500 sheets (15,000 pages) for continuous printing without power save.
Approx. 6,500 sheets (13,000 pages) for 6page job without power save.
Approx. 5,000 sheets (10,000 pages) for 2page job without power save.

2) Replacement period : Indicated by the "REPLACE IMAGEDRUM" message display on the operator.

4. RELIABILITY

1) MPBF

Mean Pages Between Failures (MPBF):24,000 sheets.

2) Durability

5 years or 200,000 sheets

3) Jam rate (under specified operation temperature and humidity)

	Standard paper(Xerox 4200)	Specical paper
1st (standard) tray	Less than 1/5,000(B410/430) Less than 1/2500(B420/440)	
Second tray Unit	Less than 1/2,500	
Multi-Purpose Tray	Less than 1/2,500	
manual Tray	-	

4) Double feeding rate (under specified operation temperature and humidity)

	Standard paper(Xerox 4200)	Specical paper
1st (standard) tray	Less than 1/3,000(B410/430) Less than 1/1,500(B420/440)	
Second tray Unit	Less than 1/2,500	
Multi-Purpose Tray	Less than 1/500	
manual Tray	-	

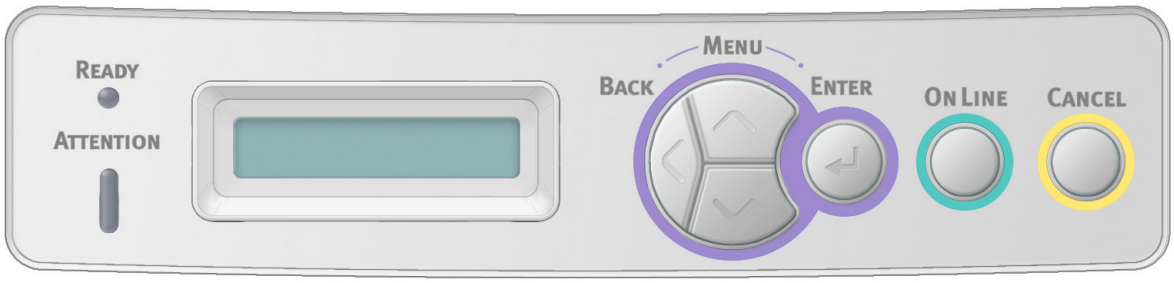
5. MAINTENANCE

Mean Time To Repair (MTTR): 20 minutes or less.

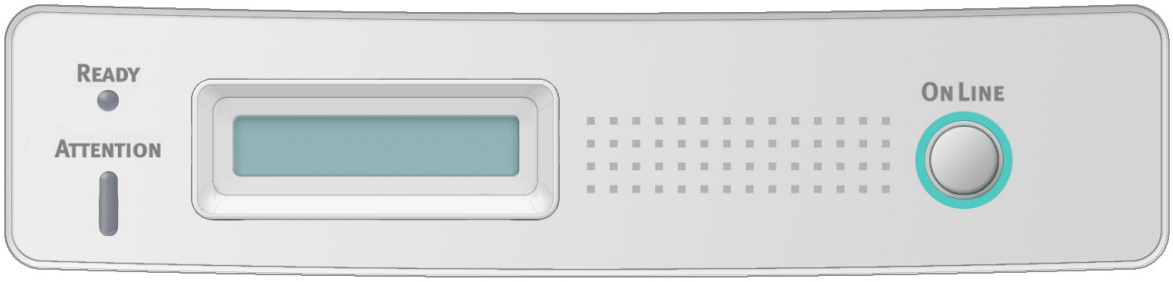
6. OPERATOR PANEL FUNCTION

6.1 Layout of Switches and Lamps

B420/B430/B440 (ODA/OEL/AOS)



B410 (ODA/OEL/AOS)



6.2 Function of Switches

6.2.1 B420/B430/B440 (ODA/OEL/AOS)

The functions of each switch are as follows:

1) On-line Switch
   In On-line mode : Goes off-line.
   In Off-line mode : Goes on-line.
   In Menu mode : Exits the Menu mode and goes on-line.
   In Error mode : Forces to print despite the wrong paper size or paper type if proper paper is requested due to the improper paper size or paper type. When Manual Print is requested, loading paper in Manual Feed, then pressing this switch will prompt printing.

2) Cancel Switch
   In On-line mode : Deletes a job being processed. Cancels a job being printed and deletes. Completes receiving a job being received and deletes it.
   In Off-line mode : Cancel switch is disabled.
   In Menu mode : Exits the Menu mode and goes on-line. Does not delete a job being processed if any.
   In Error mode : Deletes one job if jobs are pending due to Paper End error. Completes receiving a job being received and deletes it. Returns to the original error status except for Paper End error after deletion of a job.

3) Enter Switch
   In On-line mode : Enters the Menu mode. The internal state while in the Menu mode is off-line.
   In Off-line mode : Enters the Menu mode.
   In Menu mode : Advances the Category in the Menu. Reverses the Category to the previous when pressed for two seconds or longer.

4) Menu ∧ Switch
   In On-line mode : Enters the Menu mode.
   In Off-line mode : Enters the Menu mode.
   In Menu mode : Advances the Item in the Menu. Advances fast when pressed for two seconds or longer.

5) Menu ∨ Switch
   In On-line mode : Enters the Menu mode.
   In Off-line mode : Enters the Menu mode.
   In Menu mode : Reverses the Item in the Menu. Reverses fast when pressed for two seconds or longer.

6) Back Switch
   In On-line mode : Pressed for 4 sec. Display “SHUTDOWN START”.
   In Off-line mode : Pressed for 4 sec. Display “SHUTDOWN START”.
   In Menu mode : Exits the Menu mode or Back to 1 step display item. Pressed for 4 sec. Display “SHUTDOWN START”.

6.2.2 B410 (ODA/OEL/AOS)

For switch operation, there are four types: quick press, 2-second press, 5-second press and powering-on press.

1) Quick press (Momentary)
   ① The state in which the switch is released within 2 seconds since it starts to be pressed.
   ② The motion starts at the instant of releasing the switch.

2) 2-second press (at least 2 seconds, less than 5 seconds)
   ① The state in which the switch is pressed for at least 2 seconds and released within the period of 5 seconds
   ② The motion starts at the instant of releasing the switch within 5 seconds.

3) 5-second press (at least 5 seconds)
   ① The state in which the time since starting to press the switch until releasing it is 5 seconds or more.
   ② The motion starts after 5 seconds past regardless of whether or not the switch is released.

4) Powering-on Press
   ① A state in which the switch is being pressed when turning on the power.
   ② The timing when the motion starts is after pressing for at least 2 seconds and independent of the timing when the switch is released.

Switch functions

	Printer status immediately before the switch was pressed	Momentary press	2 second press	5 second press(*1)
(1)	POWER ON with cover closed	-	-	EEPROM RESET
(1)-2	POWER ON with cover open+ Entrance sensor 1 ON + Entrance sensor2 OFF (Not disclosed to users)	-	-	Always ON-LINE mode (Factory support function)
(1)-3	POWER ON with cover open + Entrance sensor 1 ON + WR sensor ON (Not disclosed to users)	-	-	ROM debug start function
(1)-4	POWER ON with cover open + Entrance sensor 1 OFF + WR sensor ON (Not disclosed to users)	-	-	FLASH INITIALIZE function
(2)	ON-LINE Data being received Data being processed Printer is printing	-->Shifts to (4)OFF-LINE data receiving interrupted	JOB CANCEL and shifts to (9) ON-LINE(Ready) * If next job exists, shifts to (2)	-
(3)	ON-LINE Data receiving interrupted Data exists in the buffer	-->Shifts to (4)OFF-LINE data receive interrupted	JOB CANCEL and shifts to (9) ON-LINE(Ready) * If next job exists, shifts to (2)	Data print (9) ON-LINE (Ready)
(3)-1	MANUAL REQUEST, TRAY REQUEST	From TRAY1 to compulsive printing	JOB CANCEL and shifts to (9)ON-LINE(Ready) * If next job exists, shifts to (2)	-
(4)	OFF-LINE Data receiving interrupted Data exists in the buffer	-->Shifts to (2)ON-LINE data receiving * If data receiving is interrupted, becomes status (3)	JOB CANCEL and shifts to (9) ON-LINE(Ready) * If next job exists, shifts to (2)	-

	Printer status immediately before the switch was pressed	Momentary press	2 second press	5 second press(*1)
(5)	OFF-LINE MEMORY OVERFLOW INVALID DATA	-->After the recovery, shifts to (3)ON-LINE data being received	-	-
(6)-1	OFF-LINE PAPER OUT * Automatically recovers when you supply paper	-	JOB CANCEL and shifts to (9) ON-LINE(Ready) * If next job exists, shifts to (2)	-
(6)	OFF-LINE PAPER JAM * Automatically recovers when you remove jammed paper	-	-	-
(7)	OFF-LINE	-->Shifts to (9)ON-LINE	MENU MAP print (Prints in the order of Menu and Demo)	Cleaning print
(8)	TONER LOW	-	-	-
(9)	ON-LINE(Ready)	-->Shifts to (7)OFF-LINE	-	-(*2)

(*1) In case of POWER ON while pressing down the key, the printer sometimes needs 5 seconds or longer before the function starts to work.
(Finalizing the function such as expanded RAM check may take 5 seconds or longer.)
In such a case, refer to the LED display and make sure the function is finalized and then release the key.

(*2) It is not concerned with the existence of JOB but JOB cancellation is performed internally. Therefore, a cancellation display may be performed.

6.3 LED Indications

The basic meanings of LED displays are as follows:

- On-line/READY LED (Green)
  ON : On-line state.
  OFF : Off-line state/Initializing/Error.
  BLINK : Receiving data/Local Print.
- Inspection/ATTENTION LED (Dark Amber)
  ON : Attention state.
  OFF : Usually state.
  BLINK : Error state.

Blink goes on/off at a 0.8sec cycle.

6.4 LCD (Liquid Crystal Display) Display Functions

6.4.1 LCD/LED Display Method

The following shows the basic display method of LCD.

LCD notifies an operator of status, error codes and accompanying information by messages. LCD has two-line display area.

6.4.2 Normal Status

This is normal operation status such as on-line or processing. Accompanying information such as copy mode printing is shown in the lower line.

6.4.3 Warning Status

This is warning status in which operation can continue. This warns the user that if he continues the operation, an error might occur.

6.4.4 Error Status

Operation cannot continue. An operator has to take an appropriate measure and recover the printer from the error. According to an error type, a 3-digit number is assigned as an error code. Fatal error means an irrecoverable error that requires a service call.
(Except for service call level errors, LCD does not show three-digit error codes.)

6.4.5 LCD/LED Display Table

The following table shows a list of status messages and alarm messages (LCD and LED displays). The priorities in the message are listed from high priority to low priority. The smaller the number is, the higher the priority is. When more than two messages are active, a message with the highest priority is displayed. Two (or more) messages are alternately displayed.

Table 6.1 LCD/LED Display Table(1/10)

Priority (When not the highest priority)	LCD	LED		Function	Status level Error code
		Ready	Atten		
2	INITIALIZING	Off	Off	The controller side is initializing.	Initializing
3	MENU RESETTING	Off	Off	Indicates that EEPROM of the controller side is being reset. The condition that EEPROM is reset includes the followings. • Changes of CU ROM (when disagreement of CU F/W version is detected) • Changes of destination channel • Compulsive initialization of EEPROM (System maintenance menu) • OEM set of PJL command	Initializing
4	RAM CHECK **********	Off	Off	RAM checking. The rate of checked capacity to the total capacity is displayed on the 2nd line.	Initializing
5	WAIT A MOMENT NETWORK INITIAL	Off	Off	The network is in initializing.	Initializing
6	FLASH ERASE	-	-	Displays that the content of Flash memory is being deleted. Deletion is not conducted unless an explicit specification is implemented in PJL command. The PJL command which eliminates a flash memory is secret to users. Therefore, this status does not occur in a user environment. And this status is only displayed on the LED by PJL command, and doesn't controled LED.	Initializing
7	FLASH CHECK	Off	Off	Displays that the content of Flash memory is being checked. It is displayed it when Resident/Option Flash memory not fomented are detected, or "MAINTENANCE MENU"-"FLASH FORMAT" of a system maintenance menu is performed. The function mentioned above is secret to users. Therefore, this status does not occur in a user environment.	Initializing
8	FLASH FORMAT	Off	Off	Displays that Flash memory is being formatted. It is displayed it when Resident/Option Flash memory not fomented are detected, or "MAINTENANCE MENU"-"FLASH FORMAT" of a system maintenance menu is performed. The function mentioned above is secret to users. Therefore, this status does not occur in a user environment.	Initializing
11	PROGRAM UPDATE MODE	Off	Off	Displays that a printer is a special mode to conduct the update of the NIC program (Controller firmware). This mode starts by turning on power with pressing Online switch.	Initializing
12	WAIT A MOMENT DATA RECEIVE	Off	Blink	Displays that the NIC program data to update is being received.	Initializing
13	WAIT A MOMENT DATA RECEIVED OK	Off	Off	Displays that the NIC program data to update has been received.	Initializing
14	CHECK DATA REC DATA ERROR <%DLCODE%>	Off	On	Displays that an error takes place while the NIC program data to update is being received. %DLCODE% 1 : Size Error 2 : Check SUM Error 3 : Printer Model No. Error 4 : Module I/F Version Error 5 : FAT Version Error	Initializing
15	WAIT A MOMENT DATA WRITING	Off	Blink	Displays that the NIC program data to update is being written.	Initializing
16	POWER OFF/ON DATA WRITTEN OK	Off	Off	Displays that the NIC program data to update has been written.	Initializing

Table 6.1 LCD/LED Display Table(2/10)

Priority (When not the highest priority)	LCD	LED		Function	Status level Error code
		Ready	Atten		
17	CHECK DATA DATA WRITE ERROR <%DLCODE%>	Off	On	Displays that an error takes place while the NIC program data to update is being written. %DLCODE% 1 : Memory alloc Error 2 : Download File Error 3 : Device Free space acquirement Error 4 : Device Free area Shortage Error 5 : File Write Error 6 : CU-F/W Mismatch Error	Initializing
20	STATUS MODE	Off	Off	Displays that normal Online mode starts. Data (Job) from an external portion is processed even though an error takes place after Online (ready) state once this mode starts. Displays Error or Warning on a panel. If a power supply is turned on pressing a <Enter>+ <Back>+<Down> switch, it will enter into this mode. This function is secret to users. Therefore, this status does not occur in a user environment.	Initializing
21	ONLINE	On	Off	Shows on-line status.	Normal
22	OFFLINE	Off	Off	Shows off-line status. * Ready LED in off-line is always assumed to be Off.	Normal
23	FILE ACCESSING	Varies	Varies	The status showing FILE SYSTEM (FLASH) is being accessed.	Normal
24	DATA ARRIVE	Varies	Varies	Data receiving, process not started yet. Displayed mainly during PJL process without text print data or during job spooling. This status is displaied by the "OKIDATAARRIVEVISIBLE"pjl command.	Normal
25	PROCESSING	Blink	Varies	Data receiving or output processing	Normal
26	DATA	Varies	Varies	Un-printed data remains in Buffer. Waiting for data to follow.	Normal
27	PRINTING	Varies	Varies	A printer is printing.	Normal
28	PRINT DEMO PAGE	Varies	Varies	Printing Demo Pages	Normal
29	PRINT FONT	Varies	Varies	Printing Font Lists ※ PDL Only	Normal
30	PRINT MENU MAP	Varies	Varies	Printing Menu Maps	Normal
31	PRINT FILE LIST	Varies	Varies	Printing File Lists ※ PDL Only	Normal
31	PRINT CLEANING	Varies	Varies	Printing Cleaning Page	Normal
32	PRINT ERROR LOG	Varies	Varies	Printing Error Logs ※ PDL Only	Normal
33	PRINT NETWORK CONFIG	Varies	Varies	It is shown that a network setup is printing. If chosen by menu "INFORMATION MENU"-"NETWORK", printing of a network setup will be started.	Normal
40 (39)	□ COPY kkk/lll	Varies	Varies	Copy printing. kkk: The number of pages in printing. lll: The total number of printing. When the number of copy is 1, it is a normal printing display. In status of Priority=121 ~ 125, Display Priority is 39.	Normal

Table 6.1 LCD/LED Display Table(3/10)

Priority (When not the highest priority)	LCD	LED		Function	Status level Error code
		Ready	Atten		
41	CONTINUOUS PRINT	Varies	Varies	Printing ROLLING ASCII	
34	CANCELING JOB	Blink	Varies	Indicates that job cancellation has been instructed and data is being ignored until the job completion.	Normal
34	CANCELING JOB (JAM)	Blink	Varies	Indicates if JAM occurs when Jam Recover is OFF, that job cancellation has been instructed and data is being ignored until the job completion.	Normal
34	CANCELING JOB (USER DENIED)	Blink	Varies	Indicates a job being cancelled due to no print permit. (Related to JobAccount) 1. A job received from a user who is denied printing.	Normal
34	CANCELING JOB (BUFFER FULL)	Blink	Varies	Indicates that a job is being cancelled because the printer area where the logs are stored has been used up and also "Cancel job" is specified as an operation at the time of Log Full. (Related to JobAccount)	Normal
39	□ ADJUSTING TEMP	Varies	Varies	Warming up.	Normal
39	□ POWER SAVE	Varies	Varies	A printer is in power save mode.	Normal
39	□ 509 PRINTER LIFE	Varies	Off	The life of printer go to the end. When print page count reached 200000 and pjl command OKIPRINTERLIFESUPPORT is set to ON, this status will be raised. Otherwise, this status will not raised. (Correspondence for the Japanese Ministry of Labor)	Warning
39	□ TONER LOW	Varies	On (Blink) (Off)	Toner amount is low. Displayed in a combination of other message in the first line. In case of MENU "SYS CONFIG MENU"-"LOW TONER"=STOP, ATTENTION LED blinks and the printer shifts to OFF Line. When an ONLINE switch is pushed, or when arbitrary errors occur and the error is canceled, an off-line state is canceled, and printing is continued until it is set to Toner Empty. Arbitrary errors are errors of Priority 301-361. "TONER LOW" status occurs when the power is on, the LED of ATTENTION in a case of MENU "SYS CONFIG MENU"-"LOW TONER"=STOP is blinked and go back to the off line after the initializing process. It is possible to operate untill "TONER EMPTY" by pressing "ONLINE switch". Moreover, when set as ADMIN MENU "CONFIG MENU"-"NEARLIFE LED"=DISABLE, Attention LED is switched off.	Warning
39	□ NON OEM TONER DETECTED	Varies	On	It shows the toner cartridge of authorized 3rd party. (RFID Licensed to 3rd party)	Warning
39	□ TONER REGIONAL MISMATCH	Varies	On	The Region ID of toner cartridge is not proper to the distribution channel.	Warning
39	□ NON GENUINE TONER	Varies	On	The chip of RFID is not compatible.	Warning
39	□ PS3 EMUL ERROR	Blink	Varies	Interpreter detects an error due to the following reason. Receive data after this is ignored until the job completion. When the job is completely received, this is automatically cleared. - The job has a grammatical error. - The page is complicated, and VM was used up. ※ PDL Only	Warning

Table 6.1 LCD/LED Display Table(4/10)

Priority (When not the highest priority)	LCD	LED		Function	Status level Error code
		Ready	Atten		
39	□ ORDER DRUM	Varies	On (Off)	The life of the drum (warning). Displayed in a combination of other message in the first line. The printer stops at the point when it reaches the drum life (Shifts to error, OFF-LINE.) Moreover, when set as ADMIN MENU "CONFIG MENU"-"NEARLIFE LED"=DISABLE, Attention LED is switched off.	Warning
39	□ TONER EMPTY	Varies	On	The thing that the toner empties is shown. This status (Warning) is displayed to open/close the cover or turn on the power supply again after the error of no toner occurs. Moreover, it is generated instead of the error of the no toner when set to the print continuance mode (user closed-door).	Warning
39	□ TONER SENSOR	Varies	On	The thing that abnormality is detected in the toner sensor is shown. Operation is possible usually. When the setting of the engine is Factory mode, it is assumed the state of the error. (ERR 163)	Warning
39	□ TONER NOT INSTALLED	Varies	On	Notifies the toner cartridge is not installed. This is a warning only.	Warning
39	□ DRUM LIFE	Varies	On	The thing that the image drum becomes longevity is shown. When the cover is opened and shut and it is restored temporarily when the Image Drum Life error occurs, this status (warn) is generated. When the toner empty error has been complicated, it is generated.	Warning
39	□ DRUM LIFE	Varies	On	The thing that the image drum becomes longevity is shown. When the cover is opened and shut and it is restored temporarily when the Image Drum Life error occurs, this status (warn) is generated. When the toner empty error has not been complicated, it is generated.	Warning
39	□ %TRAY% EMPTY	Varies	On	%TRAY%: The tray is empty. Treated as Warning until printing to the empty tray is designated. %TRAY% Tray1 Tray2 MP TRAY	Warning
39	□ TRAY1 OR DUPLEX OPEN	Varies	On	The tray1 is open or Duplex Unit is open. (Occurs only when OKIDUPLEXUNITEXIST=ON and under the condition of printing)	Warning
39	□ FILE SYSTEM IS FULL	Varies	On	The thing that the free space is lost is shown in the filesystem of record device (FLASH). this is a temporary warning. Because this is a temporary warning, it remains until the end of the job and disappears.	Warning
39	□ FILE IS WRITE PROTECTED	Varies	On	An attempt to write in a read-only file was done. Because this is a temporary warning, it remains until the end of the job and disappears.	Warning
39	□ JOB LOG. DISK FULL	Varies	On	Indicates that the free space of the storage device is too small to execute PRINT STATISTICS SYSTEM. ※ PDL Only	Warning
39	□ INVALID ID. JOB REJECTED	Varies	On	Notifies users that jobs have been cancelled because they are not permitted for printing. (Related to JobAccount). Stays displayed until the ON LINE key is pressed.	Warning
39	□ LOG BUFFER FULL. JOB REJECTED	Varies	On	Notifies users that jobs have been cancelled because the buffer is full. (Related to JobAccount.)Stays displayed until the ON LINE key is pressed.	Warning

Table 6.1 LCD/LED Display Table(5/10)

Priority (When not the highest priority)	LCD	LED		Function	Status level Error code
		Ready	Atten		
39	□ FILE OPERATION FAILED %FS_ERR%	Varies	On	The filesystem error is occurred. Operation that does not involve the filesystem is available. nnn: An identifier to Error type (For details, see the overview chapter.) %FS_ERR% = 0 … GENERAL ERROR = 1 … VOLUME NOT AVAILABLE = 3 … FILE NOT FOUND = 4 … NO FREE FILE DESCRIPTORS = 5 … INVALID NUMBER OF BYTES = 6 … FILE ALREADY EXISTS = 7 … ILLEGAL NAME = 8 … CANT DEL ROOT = 9 … NOT FILE = 10 … NOT DIRECTORY = 11 … NOT SAME VOLUME = 12 … READ ONLY = 13 … ROOT DIR FULL = 14 … DIR NOT EMPTY = 15 … BAD DISK = 16 … NO LABEL = 17 … INVALID PARAMETER = 18 … NO CONTIG SPACE = 19 … CANT CHANGE ROOT = 20 … FD OBSOLETE = 21 … DELETED = 22 … NO BLOCK DEVICE = 23 … BAD SEEK = 24 … INTERNAL ERROR = 25 … WRITE ONLY	Warning
41	PRESS ONLINE SW INVALID DATA	Varies	Varies	Invalid data was received. Press the On-line switch and eliminate the warning. Displayed when unsupported PDL commandis received. ※ PDL Only	Warning
47 [45]	LOAD %MEDIA_SIZE% IN MP TRAY AND PRESS ONLINE SWITCH	On	Off	Manual paper feed is required. Manually insert the paper shown by %MEDIA_SIZE%. The unit of paper size in Custom: The unit specified for MPTray (menu setting) is used if no unit is specified by the driver. When the driver specifies a unit, the unit is used for display. Paper size displays in Custom mode: "<width>x<length><unit>" ex.) 210x297 MM 8.5x11.0 INCH	Error (ONLINE)
47 [45]	MANUAL mmmm REQUEST	On	Off	The form shown by mmmm is urged and the hand is urged to be inserted. Manual paper feed is required. Manually insert the paper shown by mmmm.	Error
47 [45]	%TRAY% DUPLEX REQUEST	Varies	Blink	Paper feeding is reccomended because the print of back sides(odd number pages) is finished during the Manual Duplex print. %TRAY% Tray1 MANUAL Tray2 MPTray	Error (ONLINE)

Table 6.1 LCD/LED Display Table(6/10)

Priority (When not the highest priority)	LCD	LED		Function	Status level Error code
		Ready	Atten		
47 [45]	LOAD %MEDIA_SIZE%/ %MEDIA_TYPE% AND PRESS ONLINE SWITCH %ERRCODE%:%TRAY% MEDIA MISMATCH	Off	Blink	The media type in the tray and the print data do not match. Load mmmmmmm/pppppp paper in ttttt tray (It takes a while until the status disappears after you have closed the tray and the lever lifted.) (ttttt: TrayName, mmmmmm: PaperName. pppppp: MediaTypeName) Error 461 : Tray1 Error 462 : Ttay2 Paper size displays in Custom mode: "<width>x<length><unit>" ex.) 210x297 MM 8.5x11.0 INCH The unit of paper size in Custom: The unit specified for MPTray (menu setting) is used if no unit is specified by the driver. When the driver specifies a unit, the unit is used for display. As a user pressed ONLINE key, the printer could ignore this error at the just printing job.	Error 461 462
47 [45]	LOAD %MEDIA_SIZE%/ %MEDIA_TYPE% AND PRESS ONLINE SWITCH %ERRCODE%:%TRAY% MEDIA MISMATCH	Off	Blink	The media type in the tray and the print data do not match. Load paper in tray (It takes a while until the status disappears after you have closed the tray and the lever lifted.) (%TRAY%: TrayName, %MEDIA_SIZE%: PaperName. %MEDIA_TYPE%: MediaTypeName) Error 460 : MPTray Paper size displays in Custom mode: "<width>x<length><unit>" ex.) 210x297 MM 8.5x11.0 INCH The unit of paper size in Custom: The unit specified for MPTray (menu setting) is used if no unit is specified by the driver. When the driver specifies a unit, the unit is used for display. A user needs to press ONLINE key after changing the paper.	Error 460
46	LOAD %MEDIA_SIZE%/ %MEDIA_TYPE% AND PRESS ONLINE SWITCH %ERRCODE%:%TRAY% SIZE MISMATCH	Off	Blink	The size of paper or media type in the tray does not match the print data. Load paper in tray (It takes a while until the status disappears after you have closed the tray and the lever lifted.) Error 461 : Tray1 Error 462 : Ttay2 The paper size displaying form of the custom mode is the same as above. As a user pressed ONLINE key, the printer could ignore this error at the just printing job.	Error 461 462
47 [45]	LOAD %MEDIA_SIZE%/ %MEDIA_TYPE% AND PRESS ONLINE SWITCH %ERRCODE%:%TRAY% SIZE MISMATCH	Off	Blink	The media type in the tray and the print data do not match. Load paper in tray (It takes a while until the status disappears after you have closed the tray and the lever lifted.) (%TRAY%: TrayName, %MEDIA_SIZE%: PaperName. %MEDIA_TYPE%: MediaTypeName) Error 460 : MPTray Paper size displays in Custom mode: "<width>x<length><unit>" ex.) 210x297 MM 8.5x11.0 INCH The unit of paper size in Custom: The unit specified for MPTray (menu setting) is used if no unit is specified by the driver. When the driver specifies a unit, the unit is used for display. A user needs to press ONLINE key after changing the paper.	Error 460
47 [45]	DOWNLOAD MESSAGE PROCESSING	Varies	Varies	Indicates that message data to be updated is being processed.	Error (ONLINE)

Table 6.1 LCD/LED Display Table(7/10)

Priority (When not the highest priority)	LCD	LED		Function	Status level Error code
		Ready	Atten		
47 [45]	DOWNLOAD MESSAGE WRITING	Varies	Varies	Indicates that message data to be updated is being written.	Error (ONLINE)
47 [45]	DOWNLOAD MESSAGE SUCCESS	Varies	Varies	Indicates that message data to be updated has been written successfully.	Error (ONLINE)
47 [45]	DOWNLOAD MESSAGE FAILED %CODE%	Varies	Varies	Indicates that writing of message data to be uploaded has been failed. %CODE% is a decimal value (one digit) and represents the cause of failure in writing. = 1 … FAIL: Other errors. = 2 … DATA_ERROR: Hash check error in data reading/writing, or abnormal FLASH = 3 … OVERFLOW: Downloading failure due to FLASH memory full at starting or during writing in a language file = 4 … MEMORYFULL: Memory reservation failure = 5 … UNSUPPORTED_DATA: Downloading data unsupported on the printer	Error (ONLINE)
47 [45]	NETWORK CONFIG WRITING	Varies	Varies	This appears during the NIC configuration data is storing into the flash memory, as the setting was changed.	Error (ONLINE)
47 [45]	WAIT A MOMENT NETWORK INITIAL	Varies	Varies	This appears when the NIC initialization is occurred, as the setting was changed.	Error (ONLINE)
46	LOAD %MEDIA_SIZE% %ERRCODE%:%TRAY% EMPTY	Off	Blink	Printing request is issued to an empty tray. Load paper. (It takes a while until the status disappears after you have closed the tray and the lever lifted.) Error 491 : Tray1 Error 492 : Tray2 The paper size displaying form of the custom mode is the same as above.	Error 491 492
47 [45]	LOAD %MEDIA_SIZE% AND PRESS ONLINE SWITCH %ERRCODE%:MP TRAY EMPTY	Off	Blink	Printing request is issued to an empty MPTray. If it goes through a definite period of time (PU firmware holds time(3 sec)) after a user places paper, a printer will lift up the multipurpose tray, and will perform re-feeding. If a user pushes the ONLINE button before timeout, the printer perform also re-feeding,. Error 490 : MPTray	Error 490
46	INSTALL PAPER CASSETTE %ERRCODE%:TRAY1 OPEN	Off	Blink	Indicates removal of the paper cassette of Tray 1 that is a paper path in attempting to print from Tray 2. (Occurs only when OKIDUPLEXUNITEXIST=OFF)	Error 440
46	INSTALL PAPER CASSETTE %ERRCODE%:%TRAY% MISSING	Off	Blink	Indicates that paper feed is unavailable in attempting to print from Tray 1 due to removal of the paper cassette of Tray 1. (Occurs only when OKIDUPLEXUNITEXIST=OFF) %TRAY% Tray1	Error 430
46	INSTALL UNIT %ERRCODE%:TRAY1 OR DUPLEX UNIT OPEN	Off	Blink	Indicates that paper feed is unavailable in attempting to print from Tray 1 or Tray 2 due to removal of the paper cassette of Tray 1 or Duplex Unit. Conditions for display: This occurs at the following random conditions: 1. OKIDUPLEXUNITEXIST=ON and after the page ejection while printing 2. OKIDUPLEXUNITEXIST=ON and under the condition of online	Error 449

Table 6.1 LCD/LED Display Table(8/10)

Priority (When not the highest priority)	LCD	LED		Function	Status level Error code
		Ready	Atten		
47 [45]	ADD MORE MEMORY %ERRCODE%:MEMORY OVERFLOW	Off	Blink	Memory capacity overflows due to the following reason. Press ON-LINE switch so that it continues. Install expansion RAM or decrease the data amount. - Too much print data in a page. - Too much Macro data. - Too much DLL data. - After frame buffer compression, over flow occurred.	Error 420
46	REPLACE TONER %ERRCODE%:TONER EMPTY	Off	Blink	Toner ends. Warning status takes effect at Cover Open/Close.	Error 413
46	REPLACE TONER %ERRCODE%:TONER REGIONAL MISMATCH	Off	Blink	The signature ID of toner cartridge is not proper to the distribution channel, but the group of signature ID is proper (OKI regional mismatch). As probable missing to measure the amount of toner, the printer notifies error status and stop printing. Four following behavior is carried out by mode of operation. 1.Only warning display .(This error is not displayed). 2.Warning status takes effect at Cover Open/Close. 3.With no automatic concentration compensation . 4.This error is displayed and it stops.	Error 557
46	REPLACE TONER %ERRCODE%:INCOMPATIBLE TONER	Off	Blink	The signature ID of toner cartridge is not proper to the distribution channel, and the group of signature ID is not proper (OEM channel mismatch).	Error 617
46	REPLACE TONER %ERRCODE%:INCOMPATIBLE TONER	Off	Blink	The signature ID of toner cartridge is not proper to the distribution channel, and the group of signature ID is protected (OEM mismatch).	Error 623
46	GENUINE TONER IS RECOMMENDED %ERRCODE%:NON GENUINE TONER	Off	Blink	The signature ID of toner cartridge can not be recognized (Unauthorized third party). As probable missing to measure the amount of toner, the printer notifies error status and stop printing. Four following behavior is carried out by mode of operation. 1.Only warning display .(This error is not displayed). 2.Warning status takes effect at Cover Open/Close. 3.With no automatic concentration compensation . 4.This error is displayed and it stops.	Error 553
46	INSTALL TONER %ERRCODE%:TONER MISSING	Off	Blink	The toner cartridge is not installed. Four following behavior is carried out by mode of operation. 1.Only warning display .(This error is not displayed). 2.Warning status takes effect at Cover Open/Close. 3.With no automatic concentration compensation . 4.This error is displayed and it stops.	Error 613
46	CHECK IMAGE DRUM %ERRCODE%:TONER SENSOR ERROR	Off	Blink	It is shown to have detected abnormality with the toner sensor. This status is displayed only at Shipping Mode. When this trouble is detected at Factory Mode, it is displayed as service call (SC163).	Error 543
46	OPEN UPPER COVER %ERRCODE%:PAPER SIZE ERROR	Off	Blink	Inappropriate size paper was fed from a tray. Check the paper in the tray or check for Multiple-feed. Open and close the cover to perform recovery printing, and continue.	Error 400
46	CHECK MP TRAY(PN287) %ERRCODE%:PAPER JAM CHECK MANUAL(PN286) %ERRCODE%:PAPER JAM	Off	Blink	Paper jam occurred during paper feeding from tray. Error 390 : MP Tray Error 390 : MANUAL	Error 390
46	OPEN UPPER COVER %ERRCODE%:PAPER JAM	Off	Blink	Paper jam occurred during paper feeding from tray. Error 391 : Tray1 Error 392 : Tray2	Error 391 392

Table 6.1 LCD/LED Display Table(9/10)

Priority (When not the highest priority)	LCD	LED		Function	Status level Error code
		Ready	Atten		
46	OPEN UPPER COVER %ERRCODE%:PAPER JAM	Off	Blink	Jam has occurred in paper path. Error 380 : Feed	Error 380
46	OPEN UPPER COVER %ERRCODE%:PAPER JAM	Off	Blink	Jam has occurred in paper path. Error 381 : Transport Error 382 : Exit Error 389 : Printing Page Lost	Error 381 382 389
46	OPEN REAR COVER %ERRCODE%:PAPER JAM	Off	Blink	Jam has occurred nearby DUPLEX unit. Error 372 : Misfeed from Duplex	Error 372
46	REPLACE IMAGE DRUM %ERRCODE%:DRUM LIFE	Off	Blink	The life of the image drum (Alarm) Warning status takes effect at Cover Open/Close.	Error 353
46	CHECK TONER CARTRIDGE %ERRCODE%:IMPROPER LOCK LEVER POSITION	Off	Blink	Shows that the toner cartridge lever has not been locked.	Error 547
46	CHECK IMAGE DRUM %ERRCODE%:DRUM MISSING	Off	Blink	Indicates that the image drum is not set properly.	Error 343
46	CLOSE COVER %ERRCODE%:COVER OPEN	Off	Blink	The cover is open. Error 310 : Upper Cover Error 587 : Rear Cover	Error 310 587
58	WAIT A MOMENT DATA RECEIVE	Off	Blink	The printer is receiving the NIC download data.	Error
58	WAIT A MOMENT DATA RECEIVED OK	Off	Off	The printer finished receiving the NIC download data.	Error
58	CHECK DATA REC DATA ERROR <%DLCODE%>	Off	On	An error has happened while the printer is receive-processing the NIC download data. %DLCODE% 1: File size error 2: Check-sum error 3: Invalid printer model number 4: Invalid module I/F version 5: Invalid FAT version	Error
58	WAIT A MOMENT DATA WRITING	Off	Blink	The printer is writing the NIC download data.	Error
58	POWER OFF/ON DATA WRITTEN OK	Off	Off	The printer finished writing the NIC download data.	Error
58	CHECK DATA DATA WRITE ERROR <%DLCODE%>	Off	On	An error has happened while the printer is writing the NIC download data. %DLCODE% 1: Memory allocation error 2: Download file error 3: Device allocation error 4: No device space 5: File writing failure 6: CU-F/W mismatch	Error
59	POWER OFF/ON %ERRCODE%:NETWORK ERROR	Off	Blink	A network error is occurring.	Error 300
60	REBOOTING %CODE%	Off	On	Rebooting of the controller unit. %CODE% is a decimal value (one digit) and represents the reason to reboot. = 0 … Reboot due to a reason other than the followings. = 1 … Reboot due to PJLCommand. = 2 … Reboot in accordance with a menu change. = 3 … Reboot due to quit operator of PostScript Language. = 4 … reboot by Network Utility (including Web).	Error
61	SHUTTING DOWN	Off	Off	It is shown that a printer is shutting down. Shutdown processing is started with which press BACK button 4 seconds or more after the completion of initialization processing of a printer.	Error

Table 6.1 LCD/LED Display Table(10/10)

Priority (When not the highest priority)	LCD	LED		Function	Status level Error code
		Ready	Atten		
61	SHUTDOWN	Off	Off	Indicates that the printer has completed shutting down.	Error
62	PLEASE POW OFF SHUTDOWN COMP	Off	Off	It is shown that the printer completed shutdown processing.	Error
63	POWER OFF/ON %ERRCODE%:FATAL ERROR	Off	Blink	A fatal error occurred. For more information, see attached 'Fatal Errors List'. ※ Fatal Error is not available in national language.	Fatal <nnn>
63	SERVICE CALL %ERRCODE%:FATAL ERROR	Off	Blink	A fatal error occurred. For more information, see "Service Calls List". ※ Fatal Error is not available in national language.	Fatal <nnn>
63	SERVICE CALL %ERRCODE%:FATAL ERROR *	Off	Blink	A fatal error occurred. '*' specifies the detailed error cause. ※ Fatal Error is not available in national language.	Fatal 231 128 168 169
63	POWER OFF/ON %ERRCODE%:FATAL_ERROR nnnnnnnn nnnnnnnn nnnnnnnn	Off	Blink	A fatal error occurred. For more information, see "Service Calls List." 'nnnnnnnn' specifies the detailed error cause. ※ Fatal Error is not available in national language.	Fatal 002~011 F0C F0D FFE FFF

7. FONTS

7.1 Fonts (PCL)

Fonts are divided broadly into two types, bitmap and scalable (outline) fonts.

7.1.1 Bitmap Fonts

(1) Bitmap fonts are numeric data that is converted as bitmap patterns directly from character images.
(2) Portrait fonts can be rotated in increments of 90 degrees, or equivalently, printed in portrait, landscape, reverse portrait and reverse landscape orientations in one character pattern.

7.1.2 Scalable Fonts

Scalable fonts (outline fonts) are numeric data that is converted from the coordinates of the edges of character images according to specific mathematical rules.
An exclusive rasterizer is used to make bitmap patterns of the edges to generate and print the character images.
There are several types of such mathematical rules. 2D Bezier, 2D B-Spline, 3D Bezier or any other rules are used depending on each font type.
Scalable fonts are independently and freely scalable in vertical and horizontal directions, and can be rotated at any angle, flipped from side to side (to create their mirror images), slanted and boldfaced.
It takes much time for scalable fonts to be rasterized. Bitmap patterns of characters are therefore retained in cache memory.

7.2 Rasterizer

A rasterizer is a module that reads scalable font data to generate bitmap patterns and edge information based on conditions, such as scaling factors and rotation angles.
B410/B420/B430/B440 printers use UFST4.0 (PCL) from Agfa Monotype Corporation.

7.2.1 Font Caches

Rasterizer-generated bitmap patterns are once stored in cache memory. When used next time, the elements that are the same characters as those used, and also have the same attributes as those used are copied without being processed with a rasterizer.
Bitmap fonts given modifications including rotations, as well as scalable fonts, are cached.

7.3 Resident Fonts

7.3.1 Resident Fonts

The resident fonts of B410/B420/B430/B440 printers are listed in Table 7-1. A reduced fonts format is used for scalable fonts.

Table 7-1 Resident Fonts (1/2)

Font No.	TypeFace	No. of Symbol Sets	Spacing	Technology
0	Courier	97	Fixed	MicroType
1	Courier Bold	97	Fixed	MicroType
2	Courier Italic	97	Fixed	MicroType
3	Courier Bold Italic	97	Fixed	MicroType
4	CG Times	97	Proportional	MicroType
5	CG Times Bold	97	Proportional	MicroType
6	CG Times Italic	97	Proportional	MicroType
7	CG Times Bold Italic	97	Proportional	MicroType
8	CG Omega	71	Proportional	MicroType
9	CG Omega Bold	71	Proportional	MicroType
10	CG Omega Italic	71	Proportional	MicroType
11	CG Omega Bold Italic	71	Proportional	MicroType
12	Coronet	71	Proportional	MicroType
13	Clarendon Condensed	71	Proportional	MicroType
14	Univers Medium	97	Proportional	MicroType
15	Univers Bold	97	Proportional	MicroType
16	Univers Medium Italic	97	Proportional	MicroType
17	Univers Bold Italic	97	Proportional	MicroType
18	Univers Medium Condensed	71	Proportional	MicroType
19	Univers Bold Condensed	71	Proportional	MicroType
20	Univers Medium Condensed Italic	71	Proportional	MicroType
21	Univers Bold Condensed Italic	71	Proportional	MicroType
22	Antique Olive	71	Proportional	MicroType
23	Antique Olive Bold	71	Proportional	MicroType
24	Antique Olive Italic	71	Proportional	MicroType
25	Garamond Antique	71	Proportional	MicroType
26	Garamond Halbfett	71	Proportional	MicroType
27	Garamond Kursiv	71	Proportional	MicroType
28	Garamond Kursiv Halbfett	71	Proportional	MicroType
29	Marigold	71	Proportional	MicroType
30	Albertus Medium	71	Proportional	MicroType
31	Albertus Extra Bold	71	Proportional	MicroType
32	Letter Gothic	71	Fixed	MicroType
33	Letter Gothic Bold	71	Fixed	MicroType
34	Letter Gothic Italic	71	Fixed	MicroType
35	Arial	71	Proportional	MicroType
36	Arial Bold	71	Proportional	MicroType
37	Arial Italic	71	Proportional	MicroType
38	Arial Bold Italic	71	Proportional	MicroType

Table 7-1 Resident Fonts (2/2)

Font No.	TypeFace	No. of Symbol Sets	Spacing	Technology
39	Times New	71	Proportional	MicroType
40	Times New Bold	71	Proportional	MicroType
41	Times New Italic	71	Proportional	MicroType
42	Times New Bold Italic	71	Proportional	MicroType
43	ITC Avant Garde Gothic Book	71	Proportional	MicroType
44	ITC Avant Garde Gothic Demi	71	Proportional	MicroType
45	ITC Avant Garde Gothic Book Oblique	71	Proportional	MicroType
46	ITC Avant Garde Gothic Demi Oblique	71	Proportional	MicroType
47	ITC Bookman Light	71	Proportional	MicroType
48	ITC Bookman Demi	71	Proportional	MicroType
49	ITC Bookman Light Italic	71	Proportional	MicroType
50	ITC Bookman Demi Italic	71	Proportional	MicroType
51	CourierPS	71	Proportional	MicroType
52	CourierPS Bold	71	Proportional	MicroType
53	CourierPS Oblique	71	Proportional	MicroType
54	CourierPS Bold Oblique	71	Proportional	MicroType
55	Helvetica	71	Proportional	MicroType
56	Helvetica Bold	71	Proportional	MicroType
57	Helvetica Oblique	71	Proportional	MicroType
58	Helvetica Bold Oblique	71	Proportional	MicroType
59	Helvetica Narrow	71	Proportional	MicroType
60	Helvetica Narrow Bold	71	Proportional	MicroType
61	Helvetica Narrow Oblique	71	Proportional	MicroType
62	Helvetica Narrow Bold Oblique	71	Proportional	MicroType
63	New Century Schoolbook Roman	71	Proportional	MicroType
64	New Century Schoolbook Bold	71	Proportional	MicroType
65	New Century Schoolbook Italic	71	Proportional	MicroType
66	New Century Schoolbook Bold Italic	71	Proportional	MicroType
67	Palatino Roman	71	Proportional	MicroType
68	Palatino Bold	71	Proportional	MicroType
69	Palatino Italic	71	Proportional	MicroType
70	Palatino Bold Italic	71	Proportional	MicroType
71	Times Roman	71	Proportional	MicroType
72	Times Bold	71	Proportional	MicroType
73	Times Italic	71	Proportional	MicroType
74	Times Bold Italic	71	Proportional	MicroType
75	ITC Zapf Chancery Medium Italic	71	Proportional	MicroType
76	Symbol	8	Proportional	MicroType
77	SymbolPS	2	Proportional	MicroType
78	Wingdings	8	Proportional	MicroType
79	ITC Zapf Dingbats	2	Proportional	MicroType
80	Koufi	4	Fixed	MicroType
81	Koufi Bold	4	Fixed	MicroType
82	Naskh	4	Fixed	MicroType
83	Naskh Bold	4	Fixed	MicroType

Table 7-1 Resident Fonts (3/3)

Font No.	TypeFace	No. of Symbol Sets	Spacing	Technology
84	Ryagh	4	Proportional	MicroType
85	Ryagh Bold	4	Proportional	MicroType
86	Letter Gothic Italic Bold	71		MicroType
87	OKI-OCRB	1		OKI Alpha Create TrueType
88	Line Printer	74		Bitmap
89	OCR-A	8		Bitmap
90	OCR-B	8		Bitmap
91	HP ZIP Code			Bitmap
92	USPS ZIP Code			Bitmap
93	USPS FIM Bars			Bitmap
94	USPS Stamp Bar	8		Bitmap

In scalable fonts, the pitch of fixed pitch fonts can be set in 0.01 CPI increments.
The point sizes of proportional fonts can be set in 0.25 point increments.

7.3.2 Resident Bitmap Fonts

The resident bitmap fonts of B410/ B420/ B430/ B440 printers are listed below.

[Characters]

Table 7-2 Resident Bitmap Fonts

	Typeface	No. of Symbol Sets	Pitch	Point	Style	Weight	Orientation
1	LinePrinter	74	16.67	8.5	Upright	Medium	Portraite

[Characters]

Table 7-3 Resident OCR Bitmap Fonts

	Typeface	No. of Symbol Sets	Pitch	Point	Style	Weight	Orientation
1	OCR-A	8	10.00	12.0	Upright	Medium	Portraite
2	OCR-B	8	10.00	12.0	Upright	Medium	Portraite

[Barcodes]

Table 7-4 Resident Barcode Fonts

	Typeface	No. of Symbol Sets	Pitch	Point	Style	Weight	Orientation
1	USPSZIP	8	Prop	64.8	Upright	Medium	Portraite

Barcode fonts, which do not exist in independent typefaces, do not have typeface codes. These fonts cannot be selected by pitch or point size and selected by symbol set code.

For landscape, reverse portrait and reverse landscape orientations, portrait fonts rotated are printed.

7.3.3 SIDM Emulation Resident Fonts

SIDM emulation uses the following four fonts.

Table 7-5 SIDM Resident Fonts

Typeface	No. of Symbol Sets	Spacing
Courier	85	Fixed
Courier Bold		
Courier Italic		
Courier Bold Italic		

OKI NIP, which does not have fonts that are dedicated to SIDM emulation (EPSON FX, IBM PPR), uses PCL emulation purpose fonts.

7.3.3.1 Basic Specifications of SIDM Fonts

(1) The following fonts are used:

Font	Point	Pitch	Mode
Courier (Medium, Bold, Italic, Bold Italic)	12	10	10CPI, Proportional, Super/Subscrippt
Courier (Medium, Bold, Italic, Bold Italic)	10	12	12CPI, Super/Subsucript
Courier (Medium, Bold, Italic, Bold Italic)	8.5	16.5	17.1CPI, Super/Subscript
Courier (Medium, Bold, Italic, Bold Italic)	6	20	20CPI, Super/Subsucript

(2) Support for vertical enlargement and horizontal enlargement is included.
(3) Bold fonts are used for vertically emphasized printing.
(4) Print pitches conform to specified pitches.
Example) At print pitch = 10 CPI, in superscript mode, 10-CPI printing is performed (16.6 CPI is ignored).
(5) Fonts in draft and LQ (Letter Quality) modes are handled in the same way.
(6) Font cards are not supported.

7.3.3.2 Fonts Selected for SIDM

This section lists the correspondence between fonts and their character modifications in SIDM emulation.
“Double Height” character modifications make the modifications of selected fonts by enlarging them.
Some “Double Wide” character modifications enlarge selected fonts and others (those indicated with a mark ❊) use under specifications selected fonts as enlarged characters.

7.3.3.3 Fonts Used for EPSON FX

Table 7-5-1 Fonts used for EPSON FX (10 CPI, Proportional)

Pitch	Modify						Font Attribute
	Double Wide	Double Height	Emphasize	Enhance	Super/Sub Script	Italic	
10							Courier 12Pt. Medium
10						○	Courier 12Pt. Italic
10					○		Courier 12Pt.×1/2height Medium
10					○	○	Courier 12Pt.×1/2 height Italic
10				○			Courier 12Pt. Bold
10				○		○	Courier 12Pt. Bold Italic
10				○	○		Courier 12Pt.×1/2 height Bold
10				○	○	○	Courier 12Pt.×1/2 height Bold Italic
10			○				Courier 12Pt. Bold
10			○			○	Courier 12Pt. Bold Italic
10			○		○		Courier 12Pt.×1/2 height Bold
10			○		○	○	Courier 12Pt.×1/2 height Bold Italic
10			○	○			Courier 12Pt. Bold
10			○	○		○	Courier 12Pt. Bold Italic
10			○	○	○		Courier 12Pt.×1/2 height Bold
10			○	○	○	○	Courier 12Pt.×1/2 height Bold Italic
10	○						Courier 12Pt. Medium
10	○					○	Courier 12Pt. Italic
10	○				○		Courier 12Pt.×1/2 height Medium
10	○				○	○	Courier 12Pt.×1/2 height Italic
10	○			○			Courier 12Pt. Bold
10	○			○		○	Courier 12Pt. Bold Italic
10	○			○	○		Courier 12Pt.×1/2 height Bold
10	○			○	○	○	Courier 12Pt.×1/2 height Bold Italic
10	○		○				Courier 12Pt. Bold
10	○		○			○	Courier 12Pt. Bold Italic
10	○		○		○		Courier 12Pt.×1/2 height Bold
10	○		○		○	○	Courier 12Pt.×1/2 height Bold Italic
10	○		○	○			Courier 12Pt. Bold
10	○		○	○		○	Courier 12Pt. Bold Italic
10	○		○	○	○		Courier 12Pt.×1/2 height Bold
10	○		○	○	○	○	Courier 12Pt.×1/2 height Bold Italic
10		○					Courier 12Pt. Medium
10		○				○	Courier 12Pt. Italic
10		○			○		Courier 12Pt. Medium
10		○			○	○	Courier 12Pt. Italic
10		○		○			Courier 12Pt. Bold
10		○		○		○	Courier 12Pt. Bold Italic
10		○		○	○		Courier 12Pt. Bold
10		○		○	○	○	Courier 12Pt. Bold Italic
10		○	○				Courier 12Pt. Bold
10		○	○			○	Courier 12Pt. Bold Italic
10		○	○		○		Courier 12Pt. Bold
10		○	○		○	○	Courier 12Pt. Bold Italic
10		○	○	○			Courier 12Pt. Bold
10		○	○	○		○	Courier 12Pt. Bold Italic
10		○	○	○	○		Courier 12Pt. Bold
10		○	○	○	○	○	Courier 12Pt. Bold Italic

Pitch	Modify						Font Attribute
	Double Wide	Double Height	Emphasize	Enhance	Super/Sub Script	Italic	
10	○	○					Courier 12Pt. Medium
10	○	○				○	Courier 12Pt. Italic
10	○	○			○		Courier 12Pt. Medium
10	○	○			○	○	Courier 12Pt. Italic
10	○	○		○			Courier 12Pt. Bold
10	○	○		○		○	Courier 12Pt. Bold Italic
10	○	○		○	○		Courier 12Pt. Bold
10	○	○		○	○	○	Courier 12Pt. Bold Italic
10	○	○	○				Courier 12Pt. Bold
10	○	○	○			○	Courier 12Pt. Bold Italic
10	○	○	○		○		Courier 12Pt. Bold
10	○	○	○		○	○	Courier 12Pt. Bold Italic
10	○	○	○	○			Courier 12Pt. Bold
10	○	○	○	○		○	Courier 12Pt. Bold Italic
10	○	○	○	○	○		Courier 12Pt. Bold
10	○	○	○	○	○	○	Courier 12Pt. Bold Italic

Table 7-5-2 Fonts Used for EPSON FX (12 CPI)

Pitch	Modify						Font Attribute
	Double Wide	Double Height	Emphasize	Enhance	Super/Sub Script	Italic	
12							Courier 10Pt. Medium
12						○	Courier 10Pt. Italic
12					○		Courier 10Pt.×1/2 height Medium
12					○	○	Courier 10Pt.×1/2 height Italic
12				○			Courier 10Pt. Bold
12				○		○	Courier 10Pt. Bold Italic
12				○	○		Courier 10Pt.×1/2 height Bold
12				○	○	○	Courier 10Pt.×1/2 height Bold Italic
12			○				Courier 10Pt. Bold
12			○			○	Courier 10Pt. Bold Italic
12			○		○		Courier 10Pt.×1/2 height Bold
12			○		○	○	Courier 10Pt.×1/2 height Bold Italic
12			○	○			Courier 10Pt. Bold
12			○	○		○	Courier 10Pt. Bold Italic
12			○	○	○		Courier 10Pt.×1/2 height Bold
12			○	○	○	○	Courier 10Pt.×1/2 height Bold Italic
12	○						Courier 10Pt. Medium
12	○					○	Courier 10Pt. Italic
12	○				○		Courier 10Pt.×1/2 height Medium
12	○				○	○	Courier 10Pt.×1/2 height Italic
12	○			○			Courier 10Pt. Bold
12	○			○		○	Courier 10Pt. Bold Italic
12	○			○	○		Courier 10Pt.×1/2 height Bold
12	○			○	○	○	Courier 10Pt.×1/2 height Bold Italic
12	○		○				Courier 10Pt. Bold
12	○		○			○	Courier 10Pt. Bold Italic
12	○		○		○		Courier 10Pt.×1/2 height Bold
12	○		○		○	○	Courier 10Pt.×1/2 height Bold Italic
12	○		○	○			Courier 10Pt. Bold

Pitch	Modify						Font Attribute
	Double Wide	Double Height	Emphasize	Enhance	Super/Sub Script	Italic	
12	○		○	○		○	Courier 10Pt. Bold Italic
12	○		○	○	○		Courier 10Pt.×1/2 height Bold
12	○		○	○	○	○	Courier 10Pt.×1/2 height Bold Italic
12		○					Courier 10Pt. Medium
12		○				○	Courier 10Pt. Italic
12		○			○		Courier 10Pt. Medium
12		○			○	○	Courier 10Pt. Italic
12		○		○			Courier 10Pt. Bold
12		○		○		○	Courier 10Pt. Bold Italic
12		○		○	○		Courier 10Pt. Bold
12		○		○	○	○	Courier 10Pt. Bold Italic
12		○	○				Courier 10Pt. Bold
12		○	○			○	Courier 10Pt. Bold Italic
12		○	○		○		Courier 10Pt. Bold
12		○	○		○	○	Courier 10Pt. Bold Italic
12		○	○	○			Courier 10Pt. Bold
12		○	○	○		○	Courier 10Pt. Bold Italic
12		○	○	○	○		Courier 10Pt. Bold
12		○	○	○	○	○	Courier 10Pt. Bold Italic
12	○	○					Courier 10Pt. Medium
12	○	○				○	Courier 10Pt. Italic
12	○	○			○		Courier 10Pt. Medium
12	○	○			○	○	Courier 10Pt. Italic
12	○	○		○			Courier 10Pt. Bold
12	○	○		○		○	Courier 10Pt. Bold Italic
12	○	○		○	○		Courier 10Pt. Bold
12	○	○		○	○	○	Courier 10Pt. Bold Italic
12	○	○	○				Courier 10Pt. Bold
12	○	○	○			○	Courier 10Pt. Bold Italic
12	○	○	○		○		Courier 10Pt. Bold
12	○	○	○		○	○	Courier 10Pt. Bold Italic
12	○	○	○	○			Courier 10Pt. Bold
12	○	○	○	○		○	Courier 10Pt. Bold Italic
12	○	○	○	○	○		Courier 10Pt. Bold
12	○	○	○	○	○	○	Courier 10Pt. Bold Italic

Table 7-5-3 Fonts Used for EPSON FX (17 CPI)

Pitch	Modify						Font Attribute
	Double Wide	Double Height	Emphasize	Enhance	Super/Sub Script	Italic	
17.1							Courier 8.5Pt. Medium
17.1						○	Courier 8.5Pt. Italic
17.1					○		Courier 8.5Pt.×1/2 height Medium
17.1					○	○	Courier 8.5Pt.×1/2height Italic
17.1				○			Courier 8.5Pt. Bold
17.1				○		○	Courier 8.5Pt. Bold Italic
17.1				○	○		Courier 8.5Pt.×1/2 height Bold
17.1				○	○	○	Courier 8.5Pt.×1/2 height Bold Italic
17.1			○				Courier 8.5Pt. Bold
17.1			○			○	Courier 8.5Pt. Bold Italic

Pitch	Modify						Font Attribute
	Double Wide	Double Height	Emphasize	Enhance	Super/Sub Script	Italic	
17.1			○		○		Courier 8.5Pt.×1/2 height Bold
17.1			○		○	○	Courier 8.5Pt.×1/2 height Bold Italic
17.1			○	○			Courier 8.5Pt. Bold
17.1			○	○		○	Courier 8.5Pt. Bold Italic
17.1			○	○	○		Courier 8.5Pt.×1/2 height Bold
17.1			○	○	○	○	Courier 8.5Pt.×1/2 height Bold Italic
17.1	○						Courier 8.5Pt. Medium
17.1	○					○	Courier 8.5Pt. Italic
17.1	○				○		Courier 8.5Pt. .×1/2 height Medium
17.1	○				○	○	Courier 8.5Pt.×1/2 height Italic
17.1	○			○			Courier 8.5Pt. Bold
17.1	○			○		○	Courier 8.5Pt. Bold Italic
17.1	○			○	○		Courier 8.5Pt.×1/2 height Bold
17.1	○			○	○	○	Courier 8.5Pt.×1/2 height Bold Italic
17.1	○		○				Courier 8.5Pt. Bold
17.1	○		○			○	Courier 8.5Pt. Bold Italic
17.1	○		○		○		Courier 8.5Pt.×1/2 height Bold
17.1	○		○		○	○	Courier 8.5Pt.×1/2 height Bold Italic
17.1	○		○	○			Courier 8.5Pt. Bold
17.1	○		○	○		○	Courier 8.5Pt. Bold Italic
17.1	○		○	○	○		Courier 8.5Pt.×1/2 height Bold
17.1	○		○	○	○	○	Courier 8.5Pt.×1/2 height Bold Italic
17.1		○					Courier 8.5Pt. Medium
17.1		○				○	Courier 8.5Pt. Italic
17.1		○			○		Courier 8.5Pt. Medium
17.1		○			○	○	Courier 8.5Pt. Italic
17.1		○		○			Courier 8.5Pt. Bold
17.1		○		○		○	Courier 8.5Pt. Bold Italic
17.1		○		○	○		Courier 8.5Pt. Bold
17.1		○		○	○	○	Courier 8.5Pt. Bold Italic
17.1		○	○				Courier 8.5Pt. Bold
17.1		○	○			○	Courier 8.5Pt. Bold Italic
17.1		○	○		○		Courier 8.5Pt. Bold
17.1		○	○		○	○	Courier 8.5Pt. Bold Italic
17.1		○	○	○			Courier 8.5Pt. Bold
17.1		○	○	○		○	Courier 8.5Pt. Bold Italic
17.1		○	○	○	○		Courier 8.5Pt. Bold
17.1		○	○	○	○	○	Courier 8.5Pt. Bold Italic
17.1	○	○					Courier 8.5Pt. Medium
17.1	○	○				○	Courier 8.5Pt. Italic
17.1	○	○			○		Courier 8.5Pt. Medium
17.1	○	○			○	○	Courier 8.5Pt. Italic
17.1	○	○		○			Courier 8.5Pt. Bold
17.1	○	○		○		○	Courier 8.5Pt. Bold Italic
17.1	○	○		○	○		Courier 8.5Pt. Bold
17.1	○	○		○	○	○	Courier 8.5Pt. Bold Italic
17.1	○	○	○				Courier 8.5Pt. Bold
17.1	○	○	○			○	Courier 8.5Pt. Bold Italic
17.1	○	○	○		○		Courier 8.5Pt. Bold
17.1	○	○	○		○	○	Courier 8.5Pt. Bold Italic
17.1	○	○	○	○			Courier 8.5Pt. Bold

Pitch	Modify						Font Attribute
	Double Wide	Double Height	Emphasize	Enhance	Super/Sub Script	Italic	
17.1	○	○	○	○		○	Courier 8.5Pt. Bold Italic
17.1	○	○	○	○	○		Courier 8.5Pt. Bold
17.1	○	○	○	○	○	○	Courier 8.5Pt. Bold Italic

Table 7-5-4 Fonts Used for EPSON FX (20 CPI)

Pitch	Modify						Font Attribute
	Double Wide	Double Height	Emphasize	Enhance	Super/Sub Script	Italic	
20							Courier 6Pt. Medium
20						○	Courier 6Pt. Medium
20					○		Courier 6Pt.×1/2 height Medium
20					○	○	Courier 6Pt.×1/2 height Italic
20				○			Courier 6Pt. Bold
20				○		○	Courier 6Pt. Bold Italic
20				○	○		Courier 6Pt.×1/2 height Bold
20				○	○	○	Courier 6Pt.×1/2 height Bold Italic
20			○				Courier 6Pt. Bold
20			○			○	Courier 6Pt. Bold Italic
20			○		○		Courier 6Pt.×1/2 height Bold
20			○		○	○	Courier 6Pt.×1/2 height Bold Italic
20			○	○			Courier 6Pt. Bold
20			○	○		○	Courier 6Pt. Bold Italic
20			○	○	○		Courier 6Pt.×1/2 height Bold
20			○	○	○	○	Courier 6Pt.×1/2 height Bold Italic
20	○						Courier 6Pt. Medium
20	○					○	Courier 6Pt. Italic
20	○				○		Courier 6Pt. ×1/2 height Medium
20	○				○	○	Courier 6Pt.×1/2 height Italic
20	○			○			Courier 6Pt. Bold
20	○			○		○	Courier 6Pt. Bold Italic
20	○			○	○		Courier 6Pt.×1/2 height Bold
20	○			○	○	○	Courier 6Pt.×1/2 height Bold Italic
20	○		○				Courier 6Pt. Bold
20	○		○			○	Courier 6Pt. Bold Italic
20	○		○		○		Courier 6Pt.×1/2 height Bold
20	○		○		○	○	Courier 6Pt.×1/2 height Bold Italic
20	○		○	○			Courier 6Pt. Bold
20	○		○	○		○	Courier 6Pt. Bold Italic
20	○		○	○	○		Courier 6Pt.×1/2 height Bold
20	○		○	○	○	○	Courier 6Pt.×1/2 height Bold Italic
20		○					Courier 6Pt. Medium
20		○				○	Courier 6Pt. ×1/2 height Medium
20		○			○		Courier 6Pt. Medium
20		○			○	○	Courier 6Pt. Italic
20		○		○			Courier 6Pt. Bold
20		○		○		○	Courier 6Pt. Bold Italic
20		○		○	○		Courier 6Pt. Bold
20		○		○	○	○	Courier 6Pt. Bold Italic
20		○	○				Courier 6Pt. Bold

Pitch	Modify						Font Attribute
	Double Wide	Double Height	Emphasize	Enhance	Super/Sub Script	Italic	
20		○	○			○	Courier 6Pt. Bold Italic
20		○	○		○		Courier 6Pt. Bold
20		○	○		○	○	Courier 6Pt. Bold Italic
20		○	○	○			Courier 6Pt. Bold
20		○	○	○		○	Courier 6Pt. Bold Italic
20		○	○	○	○		Courier 6Pt. Bold
20		○	○	○	○	○	Courier 6Pt. Bold Italic
20	○	○					Courier 6Pt. Medium
20	○	○				○	Courier 6Pt. Italic
20	○	○			○		Courier 6Pt. Medium
20	○	○			○	○	Courier 6Pt. Italic
20	○	○		○			Courier 6Pt. Bold
20	○	○		○		○	Courier 6Pt. Bold Italic
20	○	○		○	○		Courier 6Pt. Bold
20	○	○		○	○	○	Courier 6Pt. Bold Italic
20	○	○	○				Courier 6Pt. Bold
20	○	○	○			○	Courier 6Pt. Bold Italic
20	○	○	○		○		Courier 6Pt. Bold
20	○	○	○		○	○	Courier 6Pt. Bold Italic
20	○	○	○	○			Courier 6Pt. Bold
20	○	○	○	○		○	Courier 6Pt. Bold Italic
20	○	○	○	○	○		Courier 6Pt. Bold
20	○	○	○	○	○	○	Courier 6Pt. Bold Italic

7.3.3.4 Fonts Used for IBM PPR

Table 7-5-5 Fonts Used for IBM PPR (10 CPI, Proportional)

Pitch	Modify						Font Attribute
	Double Wide	Double Height	Emphasize	Enhance	Super/Sub Script	Italic	
10							Courier 12Pt. Medium
10						○	Courier 12Pt. Italic
10					○		Courier 12Pt.×1/2heightMedium
10					○	○	Courier 12Pt.×1/2heightItalic
10				○			Courier 12Pt. Bold
10				○		○	Courier 12Pt. Bold Italic
10				○	○		Courier 12Pt.×1/2height Bold
10				○	○	○	Courier 12Pt.×1/2height Bold Italic
10			○				Courier 12Pt. Bold
10			○			○	Courier 12Pt. Bold Italic
10			○		○		Courier 12Pt.×1/2height Bold
10			○		○	○	Courier 12Pt.×1/2height Bold Italic
10			○	○			Courier 12Pt. Bold
10			○	○		○	Courier 12Pt. Bold Italic
10			○	○	○		Courier 12Pt.×1/2height Bold
10			○	○	○	○	Courier 12Pt.×1/2height Bold Italic
10	○						Courier 12Pt. Medium
10	○					○	Courier 12Pt. Italic
10	○				○		Courier 12Pt.×1/2heightMedium
10	○				○	○	Courier 12Pt.×1/2heightItalic
10	○			○			Courier 12Pt. Bold
10	○			○		○	Courier 12Pt. Bold Italic
10	○			○	○		Courier 12Pt.×1/2height Bold
10	○			○	○	○	Courier 12Pt.×1/2height Bold Italic
10	○		○				Courier 12Pt. Bold
10	○		○			○	Courier 12Pt. Bold Italic
10	○		○		○		Courier 12Pt.×1/2height Bold
10	○		○		○	○	Courier 12Pt.×1/2height Bold Italic
10	○		○	○			Courier 12Pt. Bold
10	○		○	○		○	Courier 12Pt. Bold Italic
10	○		○	○	○		Courier 12Pt.×1/2height Bold
10	○		○	○	○	○	Courier 12Pt.×1/2height Bold Italic
10		○					Courier 12Pt. Medium
10		○				○	Courier 12Pt. Italic
10		○			○		Courier 12Pt. Medium
10		○			○	○	Courier 12Pt. Italic
10		○		○			Courier 12Pt. Bold
10		○		○		○	Courier 12Pt. Bold Italic
10		○		○	○		Courier 12Pt. Bold
10		○		○	○	○	Courier 12Pt. Bold Italic
10		○	○				Courier 12Pt. Bold
10		○	○			○	Courier 12Pt. Bold Italic
10		○	○		○		Courier 12Pt. Bold
10		○	○		○	○	Courier 12Pt. Bold Italic
10		○	○	○			Courier 12Pt. Bold
10		○	○	○		○	Courier 12Pt. Bold Italic
10		○	○	○	○		Courier 12Pt. Bold
10		○	○	○	○	○	Courier 12Pt. Bold Italic

Pitch	Modify						Font Attribute
	Double Wide	Double Height	Emphasize	Enhance	Super/Sub Script	Italic	
10	○	○					Courier 12Pt. Medium
10	○	○				○	Courier 12Pt. Italic
10	○	○			○		Courier 12Pt. Medium
10	○	○			○	○	Courier 12Pt. Italic
10	○	○		○			Courier 12Pt. Bold
10	○	○		○		○	Courier 12Pt. Bold Italic
10	○	○		○	○		Courier 12Pt. Bold
10	○	○		○	○	○	Courier 12Pt. Bold Italic
10	○	○	○				Courier 12Pt. Bold
10	○	○	○			○	Courier 12Pt. Bold Italic
10	○	○	○		○		Courier 12Pt. Bold
10	○	○	○		○	○	Courier 12Pt. Bold Italic
10	○	○	○	○			Courier 12Pt. Bold
10	○	○	○	○		○	Courier 12Pt. Bold Italic
10	○	○	○	○	○		Courier 12Pt. Bold
10	○	○	○	○	○	○	Courier 12Pt. Bold Italic

Table 7-5-6 Fonts Used for IBM PPR (12 CPI)

Pitch	Modify						Font Attribute
	Double Wide	Double Height	Emphasize	Enhance	Super/Sub Script	Italic	
12							Courier 10Pt. Medium
12						○	Courier 10Pt. Italic
12					○		Courier 10Pt.×1/2heightMedium
12					○	○	Courier 10Pt.×1/2heightItalic
12				○			Courier 10Pt. Bold
12				○		○	Courier 10Pt. Bold Italic
12				○	○		Courier 10Pt.×1/2heightBold
12				○	○	○	Courier 10Pt.×1/2heightBold Italic
12			○				Courier 10Pt. Bold
12			○			○	Courier 10Pt. Bold Italic
12			○		○		Courier 10Pt.×1/2heightBold
12			○		○	○	Courier 10Pt.×1/2heightBold Italic
12			○	○			Courier 10Pt. Bold
12			○	○		○	Courier 10Pt. Bold Italic
12			○	○	○		Courier 10Pt.×1/2heightBold
12			○	○	○	○	Courier 10Pt.×1/2heightBold Italic
12	○						Courier 10Pt. Medium
12	○					○	Courier 10Pt. Italic
12	○				○		Courier 10Pt.×1/2heightMedium
12	○				○	○	Courier 10Pt.×1/2heightItalic
12	○			○			Courier 10Pt. Bold
12	○			○		○	Courier 10Pt. Bold Italic
12	○			○	○		Courier 10Pt.×1/2heightBold
12	○			○	○	○	Courier 10Pt.×1/2heightBold Italic
12	○		○				Courier 10Pt. Bold
12	○		○			○	Courier 10Pt. Bold Italic
12	○		○		○		Courier 10Pt.×1/2heightBold
12	○		○		○	○	Courier 10Pt.×1/2heightBold Italic

Pitch	Modify						Font Attribute
	Double Wide	Double Height	Emphasize	Enhance	Super/Sub Script	Italic	
12	○		○	○			Courier 10Pt. Bold
12	○		○	○		○	Courier 10Pt. Bold Italic
12	○		○	○	○		Courier 10Pt.×1/2heightBold
12	○		○	○	○	○	Courier 10Pt.×1/2heightBold Italic
12		○					Courier 10Pt. Medium
12		○				○	Courier 10Pt. Italic
12		○			○		Courier 10Pt. Medium
12		○			○	○	Courier 10Pt. Italic
12		○		○			Courier 10Pt. Bold
12		○		○		○	Courier 10Pt. Bold Italic
12		○		○	○		Courier 10Pt. Bold
12		○		○	○	○	Courier 10Pt. Bold Italic
12		○	○				Courier 10Pt. Bold
12		○	○			○	Courier 10Pt. Bold Italic
12		○	○		○		Courier 10Pt. Bold
12		○	○		○	○	Courier 10Pt. Bold Italic
12		○	○	○			Courier 10Pt. Bold
12		○	○	○		○	Courier 10Pt. Bold Italic
12		○	○	○	○		Courier 10Pt. Bold
12		○	○	○	○	○	Courier 10Pt. Bold Italic
12	○	○					Courier 10Pt. Medium
12	○	○				○	Courier 10Pt. Italic
12	○	○			○		Courier 10Pt. Medium
12	○	○			○	○	Courier 10Pt. Italic
12	○	○		○			Courier 10Pt. Bold
12	○	○		○		○	Courier 10Pt. Bold Italic
12	○	○		○	○		Courier 10Pt. Bold
12	○	○		○	○	○	Courier 10Pt. Bold Italic
12	○	○	○				Courier 10Pt. Bold
12	○	○	○			○	Courier 10Pt. Bold Italic
12	○	○	○		○		Courier 10Pt. Bold
12	○	○	○		○	○	Courier 10Pt. Bold Italic
12	○	○	○	○			Courier 10Pt. Bold
12	○	○	○	○		○	Courier 10Pt. Bold Italic
12	○	○	○	○	○		Courier 10Pt. Bold
12	○	○	○	○	○	○	Courier 10Pt. Bold Italic

Table 7-5-7-1 Fonts Used for IBM PPR (17 CPI)

Pitch	Modify						Font Attribute
	Double Wide	Double Height	Emphasize	Enhance	Super/Sub Script	Italic	
17.1							Courier 8.5Pt. Medium
17.1						○	Courier 8.5Pt. Italic
17.1					○		Courier 8.5Pt. ×1/2height Medium
17.1					○	○	Courier 8.5Pt.×1/2height Italic
17.1				○			Courier 8.5Pt. Bold
17.1				○		○	Courier 8.5Pt. Bold Italic
17.1				○	○		Courier 8.5Pt.×1/2height Bold
17.1				○	○	○	Courier 8.5Pt.×1/2height Bold Italic
17.1			○				Courier 8.5Pt. Bold

Pitch	Modify						Font Attribute
	Double Wide	Double Height	Emphasize	Enhance	Super/Sub Script	Italic	
17.1			○			○	Courier 8.5Pt. Bold Italic
17.1			○		○		Courier 8.5Pt.×1/2height Bold
17.1			○		○	○	Courier 8.5Pt.×1/2height Bold Italic
17.1			○	○			Courier 8.5Pt. Bold
17.1			○	○		○	Courier 8.5Pt. Bold Italic
17.1			○	○	○		Courier 8.5Pt.×1/2height Bold
17.1			○	○	○	○	Courier 8.5Pt.×1/2height Bold Italic
17.1	○						Courier 8.5Pt. Medium
17.1	○					○	Courier 8.5Pt. Italic
17.1	○				○		Courier 8.5Pt. ×1/2height Medium
17.1	○				○	○	Courier 8.5Pt.×1/2height Italic
17.1	○			○			Courier 12Pt. Bold
17.1	○			○		○	Courier 8.5Pt. Bold Italic
17.1	○			○	○		Courier 8.5Pt.×1/2height Bold
17.1	○			○	○	○	Courier 8.5Pt.×1/2height Bold Italic
17.1	○		○				Courier 8.5Pt. Bold
17.1	○		○			○	Courier 8.5Pt. Bold Italic
17.1	○		○		○		Courier 8.5Pt.×1/2height Bold
17.1	○		○		○	○	Courier 8.5Pt.×1/2height Bold Italic
17.1	○		○	○			Courier 8.5Pt. Bold
17.1	○		○	○		○	Courier 8.5Pt. Bold Italic
17.1	○		○	○	○		Courier 8.5Pt.×1/2height Bold
17.1	○		○	○	○	○	Courier 8.5Pt.×1/2height Bold Italic
17.1		○					Courier 8.5Pt. Medium
17.1		○				○	Courier 8.5Pt. Italic
17.1		○			○		Courier 8.5Pt. Medium
17.1		○			○	○	Courier 8.5Pt. Italic
17.1		○		○			Courier 8.5Pt. Bold
17.1		○		○		○	Courier 8.5Pt. Bold Italic
17.1		○		○	○		Courier 8.5Pt. Bold
17.1		○		○	○	○	Courier 8.5Pt. Bold Italic
17.1		○	○				Courier 8.5Pt. Bold
17.1		○	○			○	Courier 8.5Pt. Bold Italic
17.1		○	○		○		Courier 8.5Pt. Bold
17.1		○	○		○	○	Courier 8.5Pt. Bold Italic
17.1		○	○	○			Courier 8.5Pt. Bold
17.1		○	○	○		○	Courier 8.5Pt. Bold Italic
17.1		○	○	○	○		Courier 8.5Pt. Bold
17.1		○	○	○	○	○	Courier 8.5Pt. Bold Italic
17.1	○	○					Courier 8.5Pt. Medium
17.1	○	○				○	Courier 8.5Pt. Italic
17.1	○	○			○		Courier 8.5Pt. Medium
17.1	○	○			○	○	Courier 8.5Pt. Italic
17.1	○	○		○			Courier 8.5Pt. Bold
17.1	○	○		○		○	Courier 8.5Pt. Bold Italic
17.1	○	○		○	○		Courier 8.5Pt. Bold
17.1	○	○		○	○	○	Courier 8.5Pt. Bold Italic
17.1	○	○	○				Courier 8.5Pt. Bold
17.1	○	○	○			○	Courier 8.5Pt. Bold Italic
17.1	○	○	○		○		Courier 8.5Pt. Bold
17.1	○	○	○		○	○	Courier 8.5Pt. Bold Italic

Pitch	Modify						Font Attribute
	Double Wide	Double Height	Emphasize	Enhance	Super/Sub Script	Italic	
17.1	○	○	○	○			Courier 8.5Pt. Bold
17.1	○	○	○	○		○	Courier 8.5Pt. Bold Italic
17.1	○	○	○	○	○		Courier 8.5Pt. Bold
17.1	○	○	○	○	○	○	Courier 8.5Pt. Bold Italic

Table 7-5-7-2 Fonts Used for IBM PPR (20 CPI)

Pitch	Modify						Font Attribute
	Double Wide	Double Height	Emphasize	Enhance	Super/Sub Script	Italic	
20							Courier 6Pt. Medium
20						○	Courier 6Pt. Italic
20					○		Courier 6Pt. ×1/2heightMedium
20					○	○	Courier 6Pt.×1/2heightItalic
20				○			Courier 6Pt. Bold
20				○		○	Courier 6Pt. Bold Italic
20				○	○		Courier 6Pt.×1/2heightBold
20				○	○	○	Courier 6Pt.×1/2heightBold Italic
20			○				Courier 6Pt. Bold
20			○			○	Courier 6Pt. Bold Italic
20			○		○		Courier 6Pt.×1/2heightBold
20			○		○	○	Courier 6Pt.×1/2heightBold Italic
20			○	○			Courier 6Pt. Bold
20			○	○		○	Courier 6Pt. Bold Italic
20			○	○	○		Courier 6Pt.×1/2heightBold
20			○	○	○	○	Courier 6Pt.×1/2heightBold Italic
20	○						Courier 6Pt. Medium
20	○					○	Courier 6Pt. Italic
20	○				○		Courier 6Pt. ×1/2heightMedium
20	○				○	○	Courier 6Pt.×1/2heightItalic
20	○			○			Courier 6Pt. Bold
20	○			○		○	Courier 6Pt. Bold Italic
20	○			○	○		Courier 6Pt.×1/2heightBold
20	○			○	○	○	Courier 6Pt.×1/2heightBold Italic
20	○		○				Courier 6Pt. Bold
20	○		○			○	Courier 6Pt. Bold Italic
20	○		○		○		Courier 6Pt.×1/2heightBold
20	○		○		○	○	Courier 6Pt.×1/2heightBold Italic
20	○		○	○			Courier 6Pt. Bold
20	○		○	○		○	Courier 6Pt. Bold Italic
20	○		○	○	○		Courier 6Pt.×1/2heightBold
20	○		○	○	○	○	Courier 6Pt.×1/2heightBold Italic
20		○					Courier 6Pt. Medium
20		○				○	Courier 6Pt. Italic
20		○			○		Courier 6Pt. Medium
20		○			○	○	Courier 6Pt. Italic
20		○		○			Courier 6Pt. Bold
20		○		○		○	Courier 6Pt. Bold Italic
20		○		○	○		Courier 6Pt. Bold
20		○		○	○	○	Courier 6Pt. Bold Italic
20		○	○				Courier 6Pt. Bold

Pitch	Modify						Font Attribute
	Double Wide	Double Height	Emphasize	Enhance	Super/Sub Script	Italic	
20		○	○			○	Courier 6Pt. Bold Italic
20		○	○		○		Courier 6Pt. Bold
20		○	○		○	○	Courier 6Pt. Bold Italic
20		○	○	○			Courier 6Pt. Bold
20		○	○	○		○	Courier 6Pt. Bold Italic
20		○	○	○	○		Courier 6Pt. Bold
20		○	○	○	○	○	Courier 6Pt. Bold Italic
20	○	○					Courier 6Pt. Medium
20	○	○				○	Courier 6Pt. Italic
20	○	○			○		Courier 6Pt. Medium
20	○	○			○	○	Courier 6Pt. Italic
20	○	○		○			Courier 6Pt. Bold
20	○	○		○		○	Courier 6Pt. Bold Italic
20	○	○		○	○		Courier 6Pt. Bold
20	○	○		○	○	○	Courier 6Pt. Bold Italic
20	○	○	○				Courier 6Pt. Bold
20	○	○	○			○	Courier 6Pt. Bold Italic
20	○	○	○		○		Courier 6Pt. Bold
20	○	○	○		○	○	Courier 6Pt. Bold Italic
20	○	○	○	○			Courier 6Pt. Bold
20	○	○	○	○		○	Courier 6Pt. Bold Italic
20	○	○	○	○	○		Courier 6Pt. Bold
20	○	○	○	○	○	○	Courier 6Pt. Bold Italic

7.3.4 Euro Currency Code Assignment

Monetary units were about to change to a new one to cope with EU integration. The addition of an Euro currency font of the currency-mark for the new unit was required. The new currency-mark has been added to printer fonts and able to be used.
There are the following symbol sets which include the Euro currency font.

Table 7-5-8 Euro Currency Font Codes

	Name	ID	Chr	Remark
1	Windows3.0 Latin1	9U	80h	
2	Windows3.1 Latin1	19U	80h	
3	Windows3.1 Latin2	9E	80h	
4	Windows3.1 Latin5	5T	80h	
5	Windows Baltic	19L	80h	
6	Cyrillic Win3.1	9R	88h	
7	Greek Win3.1	2042Z	80h	
8	Hebrew Win3.1	2019Z	80h	
9	PC-857 (Turkish)	2040Z	D5h	
10	PC-858	13U	D5h	
11	ISO8859/15 Latin-9	9N	A4h	
12	Roman-9	4U	BAh	
13	MC Text	12J	DBh	
14	PS Math	5M	F0h	
15	Win3.1 Latin/Greek	9G	80h	
16	ISO 8859/4 Latin 4	4N	A4h	
17	ISO 8859/7 Latin/Greek	12N	A4h	

The Unicodes for Euro characters are 20ACH.

7.3.5 Symbol Sets

The following table lists symbol sets which are usable for bitmap and scalable fonts.
The order of symbol sets on menu display conforms to that in the font descripter corresponding to a selected font. Symbol sets which are not supported by a selected font are displayed later in the order listed in their table.

Table 7-6 Symbol Sets and Fonts List(1/5)

○ : A circle shows support.
- : A circle shows non-support.
Others fonts are CG Omega, Coronet, Clarendon Condensed, Univers Condensed, Antique Olive, Garamond, Marigold and Albertus.

Typeface					MicroType										Bitmap			
Spacing					Prop.		Fixed		Prop.				Fixed	Prop.	Fixed	Prop.	Fixed	
Menu Display Order	Symbol Set	LCD Display (8 characters)	LCD Display (12 characters)	ID	CG Times/ Univers	Others Fonts (Arial/ Times New/ PS2 Fonts)	Courier	Letter Gothic	Symbol	Symbol PS	Wing dings	Ding bats	Koufi / Naskh	Ryadh	Line Printer	USPS ZIP	OCR-A	OCR-B
1	PC-8	PC-8	PC-8	10U	○	○	○	○	-	-	-	-	-	-	○	-	-	-
2	PC-8 Dan/Nor	PC-8 DN	PC-8 Dan/Nor	11U	○	○	○	○	-	-	-	-	-	-	○	-	-	-
3	Turkish PC-8 (PC Turkish)	PC-8 TK	PC-8 TK	9T	○	○	○	○	-	-	-	-	-	-	○	-	-	-
4	PC775	PC-775	PC-775	26U	○	○	○	○	-	-	-	-	-	-	-	-	-	-
5	PC-850	PC-850	PC-850	12U	○	○	○	○	-	-	-	-	-	-	○	-	-	-
6	PC-852 (East Europe CPG852)	PC-852	PC-852	17U	○	○	○	○	-	-	-	-	-	-	○	-	-	-
7	PC-855 (Cyrillic 1 CPG 855)	PC-855	PC-855	2031Z	○	-	○	-	-	-	-	-	-	-	-	-	-	-
8	PC-857 (Turkish CodePG857)	PC-857	PC-857 TK	2040Z	○	○	○	○	-	-	-	-	-	-	○	-	-	-
9	PC-858	PC-858	PC-858	13U	○	○	○	○	-	-	-	-	-	-	○	-	-	-
10	PC-866 (Cyrillic 2 CPG 866)	PC-866	PC-866	3R	○	-	○	-	-	-	-	-	-	-	-	-	-	-
11	PC-869 (Greek CPG 869)	PC-869	PC-869	2041Z	○	-	○	-	-	-	-	-	-	-	-	-	-	-
12	PC1004	PC-1004	PC-1004	9J	○	○	○	○	-	-	-	-	-	-	○	-	-	-
13	Pi Font	Pi Font	Pi Font	15U	○	○	○	○	-	-	-	-	-	-	○	-	-	-
14	Polska Mazovia	Plskmzv	Plska Mazvia	2023Z	○	-	○	-	-	-	-	-	-	-	-	-	-	-
15	PS Math	PS Math	PS Math	5M	○	○	○	○	-	-	-	-	-	-	○	-	-	-
16	PS Text	PS Text	PS Text	10J	○	○	○	○	-	-	-	-	-	-	○	-	-	-
17	Roman-8	Roman-8	Roman-8	8U	○	○	○	○	-	-	-	-	-	-	○	-	-	-
18	Roman-9	Roman-9	Roman-9	4U	○	○	○	○	-	-	-	-	-	-	○	-	-	-
19	Roman Ext	RomanEx	Roman Ext	0E	○	○	○	○	-	-	-	-	-	-	○	-	-	-

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Table 7-6 Symbol Sets and Fonts List(2/5)

Typeface					MicroType										Bitmap			
Spacing					Prop.		Fixed		Prop.				Fixed	Prop.	Fixed	Prop.	Fixed	
Menu Display Order	Symbol Set	LCD Display (8 characters)	LCD Display (12 characters)	ID	CG Times/ Univers	Others Fonts (Arial/ Times New/ PS2 Fonts)	Courier	Letter Gothic	Symbol	Symbol PS	Wing dings	Ding bats	Koufi / Naskh	Ryadh	Line Printer	USPS ZIP	OCR-A	OCR-B
20	Serbo Croatic I	Ser Cr1	Serbo Croat1	2010Z	○	○	○	○	-	-	-	-	-	-	○	-	-	-
21	Serbo Croatic II	Ser Cr2	Serbo Croat2	2018Z	○	○	○	○	-	-	-	-	-	-	○	-	-	-
22	HP Spanish	Spanish	Spanish	1S	○	○	○	○	-	-	-	-	-	-	○	-	-	-
23	Ukrainian	Ukrain	Ukrainian	2017Z	○	-	○	-	-	-	-	-	-	-	-	-	-	-
24	Ventura International	VNInt'l	VN Int'l	13J	○	○	○	○	-	-	-	-	-	-	○	-	-	-
25	Ventura Math	VN Math	VN Math	6M	○	○	○	○	-	-	-	-	-	-	○	-	-	-
26	Ventura US	VN US	VN US	14J	○	○	○	○	-	-	-	-	-	-	○	-	-	-
27	Win3.0 Latin1	Win 3.0	Win 3.0	9U	○	○	○	○	-	-	-	-	-	-	○	-	-	-
28	Windows Baltic	Win Blt	Win 3.1 Blt	19L	○	○	○	○	-	-	-	-	-	-	-	-	-	-
29	Cyrillic Win3.1	Win Cyr	Win 3.1 Cyr	9R	○	-	○	-	-	-	-	-	-	-	-	-	-	-
30	Greek Win3.1	Win Grk	Win 3.1 Grk	2042Z	○	-	○	-	-	-	-	-	-	-	-	-	-	-
31	Hebrew Win3.1	Win Heb	Win 3.1 Heb	2019Z	○	-	○	-	-	-	-	-	-	-	○	-	-	-
32	Win3.1 Latin1	Win L1	Win 3.1 L1	19U	○	○	○	○	-	-	-	-	-	-	○	-	-	-
33	Win3.1 Latin2 (East Europe Win3.1)	Win L2	Win 3.1 L2	9E	○	○	○	○	-	-	-	-	-	-	○	-	-	-
34	Win3.1 Latin5	Win L5	Win 3.1 L5	5T	○	○	○	○	-	-	-	-	-	-	○	-	-	-
35	Wingdings Font	WinDing	Wingdings	579L	-	-	-	-	○	-	○	-	-	-	-	○	○	○
36	ITC Zapf Dingbats MS	Ding MS	Dingbats MS	14L	-	-	-	-	-	○	-	○	-	-	-	-	-	-
37	Symbol Font	Symbol	Symbol	19M	-	-	-	-	○	○	○	○	-	-	-	○	○	○
38	OCR-A	OCR-A	OCR-A	0O	-	-	-	-	○	-	○	-	-	-	-	○	○	○
39	OCR-B	OCR-B	OCR-B	1O	-	-	-	-	○	-	○	-	-	-	-	○	○	○
40	HP ZIP Code	HP ZIP	HP ZIP	15Y	-	-	-	-	○	-	○	-	-	-	-	○	○	○
41	USPS FIM Bars	USPSFIM	USPSFIM	98Y	-	-	-	-	○	-	○	-	-	-	-	○	○	○
42	USPS Stamp Here	USPSSTP	USPSSTP	99Y	-	-	-	-	○	-	○	-	-	-	-	○	○	○
43	USPS ZIP Code	USPSZIP	USPSZIP	97Y	-	-	-	-	○	-	○	-	-	-	-	○	○	○
44	Bulgarian	Bulgar	Bulgarian	2016Z	○	-	○	-	-	-	-	-	-	-	-	-	-	-

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Table 7-6 Symbol Sets and Fonts List(3/5)

Typeface					MicroType										Bitmap			
Spacing					Prop.		Fixed		Prop.				Fixed	Prop.	Fixed	Prop.	Fixed	
Menu Display Order	Symbol Set	LCD Display (8 characters)	LCD Display (12 characters)	ID	CG Times/ Univers	Others Fonts (Arial/ Times New/ PS2 Fonts)	Courier	Letter Gothic	Symbol	Symbol PS	Wing dings	Ding bats	Koufi / Naskh	Ryadh	Line Printer	USPS ZIP	OCR-A	OCR-B
45	CWI Hungarian	CWI Hun	CWI Hung	2044Z	○	○	○	○	-	-	-	-	-	-	○	-	-	-
46	Desk Top	DeskTop	DeskTop	7J	○	○	○	○	-	-	-	-	-	-	○	-	-	-
47	HP German	German	German	0G	○	○	○	○	-	-	-	-	-	-	○	-	-	-
48	Greek 437	Grk437	Greek-437	2024Z	○	-	○	-	-	-	-	-	-	-	-	-	-	-
49	Greek 437 Cyprus	Grk437C	Greek-437 Cy	2025Z	○	-	○	-	-	-	-	-	-	-	-	-	-	-
50	Greek 737	Grk737	Greek-737	2009Z	○	-	○	-	-	-	-	-	-	-	-	-	-	-
51	Greek 928	Grk928	Greek-928	2026Z	○	-	○	-	-	-	-	-	-	-	-	-	-	-
52	Hebrew NC(862)	HebrwNC	Hebrew NC	2020Z	○	-	○	-	-	-	-	-	-	-	○	-	-	-
53	Hebrew OC	HebrwOC	Hebrew OC	2021Z	○	-	○	-	-	-	-	-	-	-	○	-	-	-
54	IBM Codepage437	IBM-437	IBM-437	2038Z	○	○	○	○	-	-	-	-	-	-	○	-	-	-
55	IBM Codepage850	IBM-850	IBM-850	2039Z	○	○	○	○	-	-	-	-	-	-	○	-	-	-
56	IBM Codepage860	IBM-860	IBM-860	2037Z	○	○	○	○	-	-	-	-	-	-	○	-	-	-
57	IBM Codepage863	IBM-863	IBM-863	2036Z	○	○	○	○	-	-	-	-	-	-	○	-	-	-
58	IBM Codepage865	IBM-865	IBM-865	2035Z	○	○	○	○	-	-	-	-	-	-	○	-	-	-
59	ISO Dutch	Dutch	ISO Dutch	90D	○	○	○	○	-	-	-	-	-	-	○	-	-	-
60	ECMA-94 Latin1	ISO L1	ISO L1	0N	○	○	○	○	-	-	-	-	-	-	○	-	-	-
61	ISO8859/2 Latin2 (ECMA-94)	ISO L2	ISO L2	2N	○	○	○	○	-	-	-	-	-	-	○	-	-	-
62	ISO8859/9 Latin5 (ECMA-128)	ISO L5	ISO L5	5N	○	○	○	○	-	-	-	-	-	-	○	-	-	-
63	ISO8859/10 Latin6	ISO L6	ISO L6	6N	○	○	○	○	-	-	-	-	-	-	○	-	-	-
64	ISO8859/15 Latin9	ISO L9	ISO L9	9N	○	○	○	○	-	-	-	-	-	-	○	-	-	-
65	ISO Swedish1	Swedsh1	ISO Swedish1	91S	○	○	○	○	-	-	-	-	-	-	○	-	-	-
66	ISO Swedish2	Swedsh2	ISO Swedish2	92S	○	○	○	○	-	-	-	-	-	-	○	-	-	-
67	ISO Swedish3	Swedsh3	ISO Swedish3	93S	○	○	○	○	-	-	-	-	-	-	○	-	-	-
68	ISO-2 IRV	ISO-2	ISO-2 IRV	2U	○	○	○	○	-	-	-	-	-	-	○	-	-	-

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Table 7-6 Symbol Sets and Fonts List(4/5)

Typeface					MicroType										Bitmap			
Spacing					Prop.		Fixed		Prop.				Fixed	Prop.	Fixed	Prop.	Fixed	
Menu Display Order	Symbol Set	LCD Display (8 characters)	LCD Display (12 characters)	ID	CG Times/ Univers	Others Fonts (Arial/ Times New/ PS2 Fonts)	Courier	Letter Gothic	Symbol	Symbol PS	Wing dings	Ding bats	Koufi / Naskh	Ryadh	Line Printer	USPS ZIP	OCR-A	OCR-B
69	ISO-4 UK	ISO-4	ISO-4 UK	1E	○	○	○	○	-	-	-	-	-	-	○	-	-	-
70	ISO-6 US ASCII	ISO-6	ISO-6 ASC	0U	○	○	○	○	-	-	-	-	○	○	○	-	-	-
71	ISO-10 Swe/Fin	ISO-10	ISO-10 S/F	3S	○	○	○	○	-	-	-	-	-	-	○	-	-	-
72	ISO-11 Swe:names	ISO-11	ISO-11 Swe	0S	○	○	○	○	-	-	-	-	-	-	○	-	-	-
73	ISO-14 JIS ASCII	ISO-14	ISO-14 JASC	0K	○	○	○	○	-	-	-	-	-	-	○	-	-	-
74	ISO-15 Italian	ISO-15	ISO-15 Ita	0I	○	○	○	○	-	-	-	-	-	-	○	-	-	-
75	ISO-16 Portugese	ISO-16	ISO-16 Por	4S	○	○	○	○	-	-	-	-	-	-	○	-	-	-
76	ISO-17 Spanish	ISO-17	ISO-17 Spa	2S	○	○	○	○	-	-	-	-	-	-	○	-	-	-
77	ISO-21 German	ISO-21	ISO-21 Ger	1G	○	○	○	○	-	-	-	-	-	-	○	-	-	-
78	ISO-25 French	ISO-25	ISO-25 Fre	0F	○	○	○	○	-	-	-	-	-	-	○	-	-	-
79	ISO-57 Chinese	ISO-57	ISO-57 Chi	2K	○	○	○	○	-	-	-	-	-	-	○	-	-	-
80	ISO-60 Norwe v1	ISO-60	ISO-60 Nor	0D	○	○	○	○	-	-	-	-	-	-	○	-	-	-
81	ISO-61 Norwe v2	ISO-61	ISO-61 Nor	1D	○	○	○	○	-	-	-	-	-	-	○	-	-	-
82	ISO-69 French	ISO-69	ISO-69 Fre	1F	○	○	○	○	-	-	-	-	-	-	○	-	-	-
83	ISO-84 Portuguse	ISO-84	ISO-84 Por	5S	○	○	○	○	-	-	-	-	-	-	○	-	-	-
84	ISO-85 Spanich	ISO-85	ISO-85 Spa	6S	○	○	○	○	-	-	-	-	-	-	○	-	-	-
85	Kamenicky(MJK)	Kmncky	Kamenicky	2022Z	○	○	○	○	-	-	-	-	-	-	○	-	-	-
86	Legal	Legal	Legal	1U	○	○	○	○	-	-	-	-	-	-	○	-	-	-
87	Math-8	Math-8	Math-8	8M	○	○	○	○	-	-	-	-	-	-	○	-	-	-
88	MC Text	MC Text	MC Text	12J	○	○	○	○	-	-	-	-	-	-	○	-	-	-
89	MS Publishing	MS Publ	MS Publish	6J	○	○	○	○	-	-	-	-	-	-	○	-	-	-
90	PC Extension D/N	PCExtDN	PC Ext D/N	2033Z	○	○	○	○	-	-	-	-	-	-	○	-	-	-
91	PC Extension US	PCExtUS	PC Ext US	9Q	○	○	○	○	-	-	-	-	-	-	○	-	-	-
92	PC Set1	PC-Set1	PC Set1	8Q	○	○	○	○	-	-	-	-	-	-	○	-	-	-
93	PC Set2 D/N	PC2 D/N	PC Set2 D/N	2032Z	○	○	○	○	-	-	-	-	-	-	○	-	-	-

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Table 7-6 Symbol Sets and Fonts List(5/5)

Typeface					MicroType										Bitmap			
Spacing					Prop.		Fixed		Prop.				Fixed	Prop.	Fixed	Prop.	Fixed	
Menu Display Order	Symbol Set	LCD Display (8 characters)	LCD Display (12 characters)	ID	CG Times/ Univers	Others Fonts (Arial/ Times New/ PS2 Fonts)	Courier	Letter Gothic	Symbol	Symbol PS	Wing dings	Ding bats	Koufi / Naskh	Ryadh	Line Printer	USPS ZIP	OCR-A	OCR-B
94	PC Set2 US	PC2 US	PC Set2 US	2034Z	○	○	○	○	-	-	-	-	-	-	○	-	-	-
95	PC-864 (Latin/Arabic)	PC-864	PC-864 L/A	10V	-	-	-	-	-	-	-	-	○	○	-	-	-	-
96	OKI-OCRB	OKIOCRB	OKI-OCRB	2007Z	-	-	-	-	-	-	-	-	-	-	-			
97	Greek-8	Greek8	Greek-8	8G	○	-	○	-	-	-	-	-	-	-	-			
98	Win 3.1 Latin/Greek (HP Compatible)	Win L/G	Win 3.1 L/G	9G	○	-	○	-	-	-	-	-	-	-	-			
99	PC-851 Latin/Greek	PC-851 Grk	PC-851	10G	○	-	○	-	-	-	-	-	-	-	-			
100	PC-8 Latin/Greek	PC-8 Grk	PC-8Grk	12G	○	-	○	-	-	-	-	-	-	-	-			
101	Hebrew-7	Hebrew-7	Hebrew7	0H	○	-	○	-	-	-	-	-	-	-	○			
102	ISO 8859/8 Latin/ Hebrew	ISO-Hebrew	ISO-Heb	7H	○	-	○	-	-	-	-	-	-	-	○			
103	Hebrew-8	Hebrew-8	Hebrew8	8H	○	-	○	-	-	-	-	-	-	-	-			
104	PC-862 Latin/Hebrew	PC-862 Heb	PC-862	15H	○	-	○	-	-	-	-	-	-	-	○			
105	ISO8859/4 Latin 4	ISO L4	ISO L4	4N	○	○	○	○	-	-	-	-	-	-	-			
106	ISO8859/5 Latin/Cyrillic	ISO-Cyr	ISO-Cyr	10N	○	-	○	-	-	-	-	-	-	-	-			
107	ISO8859/7 Latin/Greek	ISO-Grk	ISO-Grk	12N	○	-	○	-	-	-	-	-	-	-	-			
108	PC-866 Ukrainian (HP Compatible)	PC-866 Ukr	PC-866U	14R	○	-	○	-	-	-	-	-	-	-	-			
109	Arabic-8	Arabic-8	Arabic8	8V	-	-	-	-	-	-	-	-	○	○	-			
110	Win 3.1 Latin/Arabic	Win 3.1 Arb	Win Arb	9V	-	-	-	-	-	-	-	-	○	○	-			
Total Number of Symbol Set					97	71	97	71	8	2	8	2	4	4	74	8	8	8

*Typeface OKI-OCRB supports only the symbol set OKI-OCRB.

Oki Data CONFIDENTIAL

7.4 Down Line Loading Fonts

Each down line loading font is abbreviated as DLL.
DLL's are bitmap font DLL and scalable font DLL.
The number of fonts that can be down line loaded to respective B4300 printers depends on the RAM capacities they have. The maximum number of bitmap and scalable fonts that can exist concurrently in each of them is 32,768 in total (for HP emulation).

7.4.1 Bitmap DLL Fonts

Support for a compacted bitmap data format is provided for HP emulation.

7.4.2 Scalable DLL Fonts

Down line loading data formats of scalable fonts are an Intellifont-based format (which is called PCLeo) and a TrueType-based format.

7.5 FONT (POSTSCRIPT3 EMULATION)

- Types of fonts

  Fonts can mainly be divided into Bit Map Fonts and Scalable Fonts (Outline Font).

a) Type-1 Scalable Fonts

   (1) Scalable Fonts are fonts in which the coordinate position of the edges of the character image was numericalized based on certain mathematical formulas. By patternizing to Bit Map patterns using an exclusive rasterizer, character images are formed for print.
   (2) Type-1 fonts are a program described in PostScript language, and are not data columns.
   (3) There are some types of mathematical formulas, but Type-1 fonts apply tertiary Bezier.
   (4) As rasterizing is time-consuming, characters that have been patternized into Bit Map patterns are to be registered in cache memory.

b) Type-42 Scalable Fonts

   As PostScript Interpreter supports TrueType fonts, it supports Type-42 fonts. The TrueType fonts used in the document by the user is converted to Type-42 by the printer driver on the host computer side, and is then sent to the printer. Thus, TrueType fonts are supported.

c) Type-3 Scalable Fonts

   Although Type-3 fonts were used in early PostScript printers, they aren't possessed as residents in this device. The printer driver on the host computer side downloads the fonts as Type-3 mainly when the fonts that don't exist in the printer are used in documents.
   Type-3 fonts are supported with this device.

d) Type-43 Scalable Fonts

   Type-43 fonts is a special type for PostScript made from Xionics making the MicroType font made from Agfa a PostScript font, and enabling use of it.
   Type-43 fonts is used as the PS Resident Fonts with this device.

- Resident Fonts

a) Resident Fonts

The fonts listed in Table 7-7 are the PS Resident Fonts of this device.

Table 7-7 Resident Fonts (1/3)

Font No.	Fonts	Spacing	Type	Sample
1	AlbertusMT	Proportional	43	
2	AlbertusMT-Italic	Proportional	43	
3	AlbertusMT-Light	Proportional	43	
4	Antique Olive-Roman	Proportional	43	
5	Antique Olive-Italic	Proportional	43	
6	Antique Olive-Bold	Proportional	43	
7	Antique Olive-Compact	Proportional	43	
8	Apple-Chancery	Proportional	43	
9	ArialMT	Proportional	43	
10	Arial-ItalicMT	Proportional	43	
11	Arial-BoldMT	Proportional	43	
12	Arial-BoldItalicMT	Proportional	43	
13	AvantGarde-Book	Proportional	43	
14	AvantGarde-BookOblique	Proportional	43	
15	AvantGarde-Demi	Proportional	43	
16	AvantGarde-DemiOblique	Proportional	43	
17	Bodoni	Proportional	43	
18	Bodoni-Italic	Proportional	43	
19	Bodoni-Bold	Proportional	43	
20	Bodoni-BoldItalic	Proportional	43	
21	Bodoni-Poster	Proportional	43	
22	Bodoni-PosterCompressed	Proportional	43	
23	Bookman-Light	Proportional	43	
24	Bookman-LightItalic	Proportional	43	
25	Bookman-Demi	Proportional	43	
26	Bookman-DemiItalic	Proportional	43	
27	Carta	Proportional	43	
28	Chicago	Proportional	43	
29	Clarendon	Proportional	43	
30	Clarendon-Light	Proportional	43	
31	Clarendon-Bold	Proportional	43	
32	CooperBlack	Proportional	43	
33	CooperBlack-Italic	Proportional	43	
34	Cooperplate-ThirtyTwoBC	Proportional	43	
35	Cooperplate-ThirtyThreeBC	Proportional	43	
36	Coronet-Regular	Proportional	43	
37	Courier	Fixed	43	
38	Courier-Oblique	Fixed	43	
39	Courier-Bold	Fixed	43	
40	Courier-BoldOblique	Fixed	43	
41	Eurostile	Proportional	43	
42	Eurostile-Bold	Proportional	43	
43	Eurostile-ExtendedTwo	Proportional	43	
44	Eurostile-BoldExtendedTwo	Proportional	43	

Table 7-7 Resident Fonts (2/3)

Font No.	Fonts	Spacing	Type	Sample
45	Geneva	Proportional	43	
46	GillSans	Proportional	43	
47	GillSans-Italic	Proportional	43	
48	GillSans-Bold	Proportional	43	
49	GillSans-BoldItalic	Proportional	43	
50	GillSans-Condensed	Proportional	43	
51	GillSans-BoldCondensed	Proportional	43	
52	GillSans-Light	Proportional	43	
53	GillSans-LightItalic	Proportional	43	
54	GillSans-ExtraBold	Proportional	43	
55	Goudy	Proportional	43	
56	Goudy-Italic	Proportional	43	
57	Goudy-Bold	Proportional	43	
58	Goudy-BoldItalic	Proportional	43	
59	Goudy-ExtraBold	Proportional	43	
60	Helvetica	Proportional	43	
61	Helvetica-Oblique	Proportional	43	
62	Helvetica-Bold	Proportional	43	
63	Helvetica-BoldOblique	Proportional	43	
64	Helvetica-Condensed	Proportional	43	
65	Helvetica-Condensed-Oblique	Proportional	43	
66	Helvetica-Condensed-Bold	Proportional	43	
67	Helvetica-Condensed-BoldObl	Proportional	43	
68	Helvetica-Narrow	Proportional	43	
69	Helvetica-Narrow-Bold	Proportional	43	
70	Helvetica-Narrow-BoldOblique	Proportional	43	
71	Helvetica-Narrow-Oblique	Proportional	43	
72	HoeflerText-Regular	Proportional	43	
73	HoeflerText-Italic	Proportional	43	
74	HoeflerText-Black	Proportional	43	
75	HoeflerText-BlackItalic	Proportional	43	
76	HoeflerText-Ornaments	Proportional	43	
77	JoannaMT	Proportional	43	
78	JoannaMT-Italic	Proportional	43	
79	JoannaMT-Bold	Proportional	43	
80	JoannaMT-Bolditalic	Proportional	43	
81	LetterGothic	Fixed	43	
82	LetterGothic-Slanted	Fixed	43	
83	LetterGothic-Bold	Fixed	43	
84	LetterGothic-BoldSlanted	Fixed	43	
85	LubalinGraph-Book	Proportional	43	
86	LubalinGraph-BookOblique	Proportional	43	
87	LubalinGraph-Demi	Proportional	43	
88	LubalinGraph-DemiOblique	Proportional	43	
89	Marigold	Proportional	43	
90	Monaco	Fixed	43	
91	MonaLisa-Recut	Proportional	43	
92	NewCenturySchlbk-Roman	Proportional	43	

Table 7-7 Resident Fonts (3/3)

Font No.	Fonts	Spacing	Type	Sample
93	NewCenturySchlbk-Italic	Proportional	43	
94	NewCenturySchibk-Bold	Proportional	43	
95	NewCenturySchibk-BoldItalic	Proportional	43	
96	NewYork	Proportional	43	
97	Optima	Proportional	43	
98	Optima-Italic	Proportional	43	
99	Optima-Bold	Proportional	43	
100	Optima-BoldItalic	Proportional	43	
101	Oxford	Proportional	43	
102	Palatino-Roman	Proportional	43	
103	Palatino-Italic	Proportional	43	
104	Palatino-Bold	Proportional	43	
105	Palatino-Bolditalic	Proportional	43	
106	StempelGaramond-Roman	Proportional	43	
107	StempelGaramond-Italic	Proportional	43	
108	StempelGaramond-Bold	Proportional	43	
109	StempelGaramond-BoldItalic	Proportional	43	
110	Symbol	Proportional	43	
111	Tekton	Proportional	43	
112	Times-Roman	Proportional	43	
113	Times-Italic	Proportional	43	
114	Times-Bold	Proportional	43	
115	Times-BoldItalic	Proportional	43	
116	TimesNewRomanPSMT	Proportional	43	
117	TimesNewRomanPS-ItalicMT	Proportional	43	
118	TimesNewRomanPS-BoldMT	Proportional	43	
119	TimesNewRomanPS-BoldItalicMT	Proportional	43	
120	Univers	Proportional	43	
121	Univers-Oblique	Proportional	43	
122	Univers-Bold	Proportional	43	
123	Univers-BoldOblique	Proportional	43	
124	Univers-Light	Proportional	43	
125	Univers-LightOblique	Proportional	43	
126	Univers-Condensed	Proportional	43	
127	Univers-CondensedOblique	Proportional	43	
128	Univers-CondensedBold	Proportional	43	
129	Univers-CondensedBoldOblique	Proportional	43	
130	Univers-Extended	Proportional	43	
131	Univers-ExtendedObl	Proportional	43	
132	Univers-BoldExt	Proportional	43	
133	Univers-BoldExtObl	Proportional	43	
134	Wingdings-Regular	Proportional	43	
135	ZapfChancery-MediumItalic	Proportional	43	
136	ZapfDingbats	Proportional	43	

b) Resident Bit Map Font

PSE Resident Bit Map Fonts do not exist in this device.

c) Encoding

Encoding is a mapping information on what character to assign to each ASCII code. It is equivalent to the Symbol Set of PCL.
The following encodings are the 2 standard types that are possessed. Encodings other than these are re-encoded by PostScript job.

(1) Adobe Standard Encoding
(2) ISO Latin Encoding

• Download Fonts

The followings are the types of Download fonts:

(1) Type-1 when downloading normal fonts used for PostScript
(2) Type-2 when downloading fonts mainly as Bit Map
(3) Type-42 when downloading TrueType fonts

The number of fonts that can be downloaded in this device depends on its VM capacity.

8. SELF DIAGNOSIS FUNCTIONS

8.1 ROM / RAM Check

ROM check: By performing a sum check on each ROM chip and comparing the results of the check with specific data, it verifies whether the chip is correct or not.

RAM check: By writing data into all addresses of each RAM chip and reading it from the respective chip, it verifies whether the chip is correct or not.

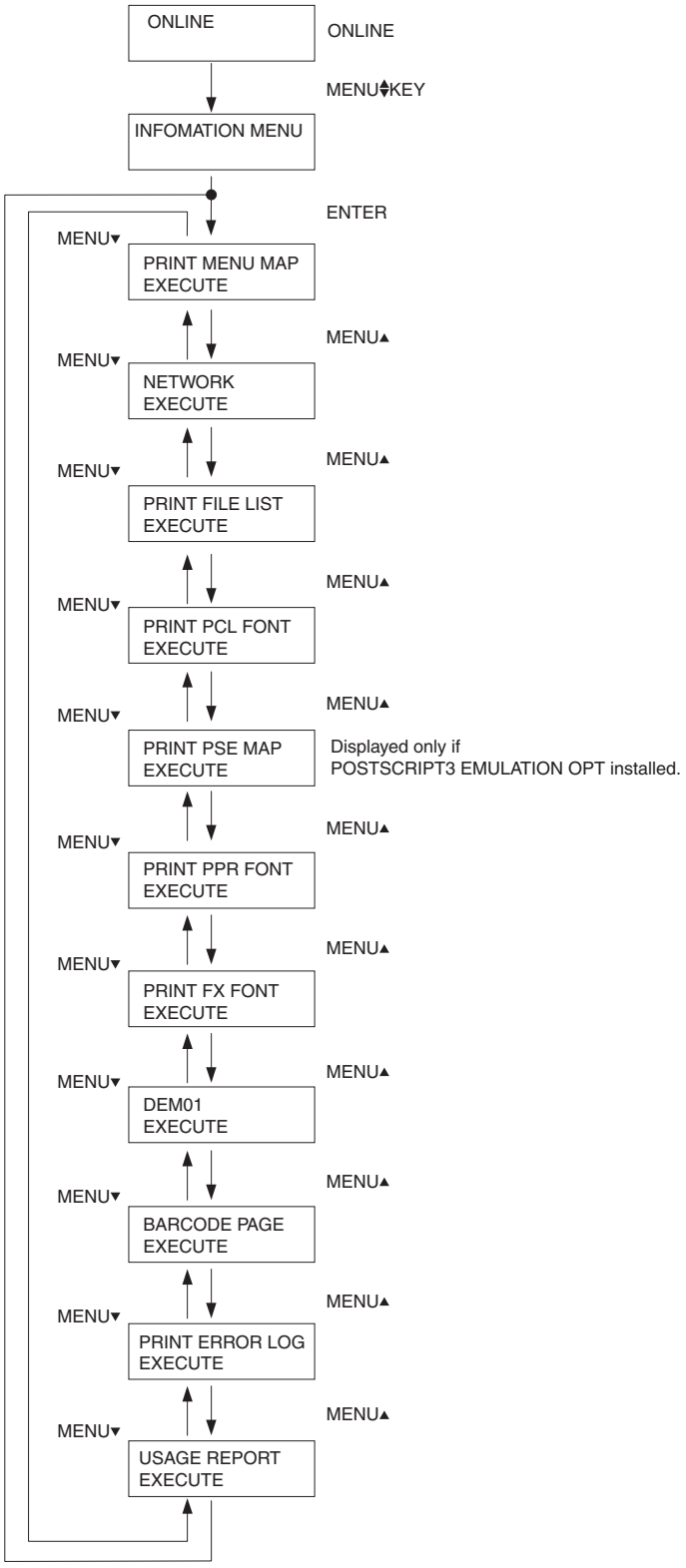
EEPROM check: (1) Checks the ID No. stored at a fixed address.
(2) The menu area check is performed independent of the engine area check.

Recognition of options:
Because the printer enters into the operation mode, it checks to see if the printer is equipped with options, such as a font card.

8.2 Test Printing

A test print goes into a menu and is chosen from information menu categories. There are twelve self test printing types.

A menu ▲ key and ENTER key pushed and it goes into information menu.
Select type to be printed with MENU ▲ ▼ key.



Pressing the ENTER key starts printing.

① B410 Menu MAP print pattern (For ODA) -1/2 (reduction : XX%)

OKI
PRINTING SOLUTIONS

B410 – DIGITAL LED PRINTER

PRINT MENU MAP

B410

Printer Serial Number: Printer Asset Number:
CU version:A0.92 [I01.18 U00.51 S3.1.1h B00.50 PPC405PS 297MHz 000 00000000 00000000 00000000 F50 J0]
PU version:00.00.97 [PI02.08] ET:01000000
PCL Program version:04.36 [04.30 X03.18 P00.44 F00.40]
DUPLEX:installed TRAY1:LETTER
Total Memory Size:32 MB Language format:1.3
Flash Memory:2 MB [F50]
ODA LCD:T1
Network version:t0.06 Web Remote:00.06

ENGINE:60 T:0, I:0

INFORMATION MENU	
PRINT MENU MAP	
NETWORK	
PRINT FILE LIST	
PRINT PCL FONT	
PRINT PPR FONT	
PRINT FX FONT	
DEMO1	
PRINT ERROR LOG	
USAGE REPORT	
PRINT MENU	
COPIES	1
DUPLEX	OFF
MANUAL	OFF
PAPER FEED	TRAY1
AUTO TRAY SWITCH	ON
TRAY SEQUENCE	DOWN
MEDIA CHECK	ENABLE
RESOLUTION	600DPI
TONER SAVE MODE	DISABLE
ORIENTATION	PORTRAIT
LINES PER PAGE	60 LINES
EDIT SIZE	CASSETTE SIZE
MEDIA MENU	
TRAY1 PAPERSIZE	LETTER
TRAY1 MEDIATYPE	PLAIN
TRAY1MEDIAWEIGHT	MEDIUM
MN PAPERSIZE	LETTER
MN MEDIATYPE	PLAIN
MN MEDIAWEIGHT	MEDIUM
UNIT OF MEASURE	INCH
X DIMENSION	8.5 INCH
Y DIMENSION	11.0 INCH
SYS CONFIG MENU	
POW SAVE TIME	10 MIN
PERSONALITY	AUTO EMULATION
CLRABLE WARNING	ONLINE
AUTO CONTINUE	ON
MANUAL TIMEOUT	60 SEC
TIMEOUT INJOB	40 SEC
TIMEOUT LOCAL	40 SEC
TIMEOUT NET	90 SEC
LOW TONER	CONTINUE
JAM RECOVERY	ON
ERROR REPORT	OFF
PCL EMULATION	
FONT SOURCE	RESIDENT
FONT NO.	I0
FONT PITCH	10.00 CPI
SYMBOL SET	PC-8
A4 PRINT WIDTH	78 COLUMN
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LF FUNCTION	LF
PRINT MARGIN	NORMAL
PEN WIDTH ADJUST	ON
TRAY ID#	
PCL MNID	2
PCL T0ID	4
PCL T1ID	1
PPR EMULATION	
CHARACTER PITCH	10 CPI
FONT CONDENSE	12CPI TO 20CPI
CHARACTER SET	SET-2
SYMBOL SET	IBM-437
LETTER O STYLE	DISABLE
ZERO CHARACTER	NORMAL
LINE PITCH	6 LPI
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LF FUNCTION	LF
LINE LENGTH	80 COLUMN
FORM LENGTH	11 INCH
TOF POSITION	0.0 INCH
LEFT MARGIN	0.0 INCH
FIT TO LETTER	ENABLE
TEXT HEIGHT	SAME
FX EMULATION	
CHARACTER PITCH	10 CPI
CHARACTER SET	SET-2
SYMBOL SET	IBM-437
LETTER O STYLE	DISABLE
ZERO CHARACTER	NORMAL
LINE PITCH	6 LPI
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LINE LENGTH	80 COLUMN
FORM LENGTH	11 INCH
TOF POSITION	0.0 INCH
LEFT MARGIN	0.0 INCH
FIT TO LETTER	ENABLE
TEXT HEIGHT	SAME
PARALLEL MENU	
PARALLEL	ENABLE
BI-DIRECTION	ENABLE
ECP	ENABLE
ACK WIDTH	NARROW
ACK/BUSY TIMING	ACK IN BUSY
I-PRIME	3 MICRO SEC
USB MENU	
USB	ENABLE
SOFT RESET	ENABLE
SPEED	480Mbps
SERIAL NUMBER	ENABLE
NETWORK MENU	
TCP/IP	ENABLE
IP VERSION	IP v4
NETBEUI	ENABLE
NETWARE	ENABLE
ETHERTALK	ENABLE
FRAME TYPE	AUTO
IP ADDRESS SET	AUTO
IP ADDRESS	192.168.100.100

B410 Menu MAP print pattern (For ODA) -2/2 (reduction : XX%)

OKI
PRINTING SOLUTIONS

B410 – DIGITAL LED PRINTER

PRINT MENU MAP

B410

Printer Serial Number: Printer Asset Number:
CU version:A0.92 [I01.18 U00.51 S3.1.1h B00.50 PPC405PS 297MHz 000 00000000 00000000 00000000 F50 J0]
PU version:00.00.97 [PI02.08] ET:01000000
PCL Program version:04.36 [04.30 X03.18 P00.44 F00.40]
DUPLEX:installed TRAY1:LETTER
Total Memory Size:32 MB Language format:1.3
Flash Memory:2 MB [F50]
ODA LCD:T1
Network version:t0.06 Web Remote:00.06

ENGINE:60 T:0, I:0

SUBNET MASK	255.255.255.0
GATEWAY ADDRESS	0.0.0.0
WEB	ENABLE
TELNET	DISABLE
FTP	DISABLE
SNMP	ENABLE
NETWORK SCALE	NORMAL
HUB LINK SETTING	AUTO NEGOTIATE
FACTORY DEFAULTS	
PRINT STATISTICS	
USAGE REPORT	ENABLE
RESET COUNTER	
GROUP COUNTER	DISABLE
CHANGE PASSWORD	
MAINTENANCE MENU	
MENU RESET	
SAVE MENU	
POWER SAVE	ENABLE
PAPER BLACK SET	0
DARKNESS	0
CLEANING	
USAGE MENU	
DRUM LIFE	REMAINING 99 %
TONER (1.5K)	REMAINING 100 %

B430 Menu MAP print pattern (For ODA) -1/2 (reduction : XX%)

OKI PRINTING SOLUTIONS

B430 – DIGITAL LED PRINTER

PRINT MENU MAP

B430

Printer Serial Number:BETA10530000 Printer Asset Number:
CU version:C0.92 [I01.18 U00.51 S3.1.1h B00.50 PPC405PS 297MHz 000 00000000 00000000 00000000 F50 J0]
PU version:00.00.97 [PI02.08] ET:01000000
PCL Program version:04.36 [04.30 X03.18 P00.44 F00.40] PSE Program version:3015, PSE10
DUPLEX:installed TRAY1:LETTER
Total Memory Size:64 MB Language format:1.3
Flash Memory:8 MB [F50]
ODA LCD:T1 DPR:1.5 58
Network version:t0.06 Web Remote:00.06

ENGINE:2144 T:0, I:0

INFORMATION MENU	
PRINT MENU MAP	
NETWORK	
PRINT FILE LIST	
PRINT PCL FONT	
PRINT PSE FONT	
PRINT PPR FONT	
PRINT FX FONT	
DEMO1	
PRINT ERROR LOG	
USAGE REPORT	
SHUTDOWN MENU	
SHUTDOWN START	
PRINT MENU	
COPIES	1
DUPLEX	OFF
PAPER FEED	TRAY1
AUTO TRAY SWITCH	ON
TRAY SEQUENCE	DOWN
MP TRAY USAGE	DO NOT USE
MEDIA CHECK	ENABLE
RESOLUTION	600DPI
TONER SAVE MODE	DISABLE
ORIENTATION	PORTRAIT
LINES PER PAGE	60 LINES
EDIT SIZE	CASSETTE SIZE
MEDIA MENU	
TRAY1 PAPERSIZE	LETTER
TRAY1 MEDIATYPE	PLAIN
TRAY1MEDIAWEIGHT	MEDIUM
MPT PAPERSIZE	LETTER
MPT MEDIATYPE	PLAIN
MPT MEDIAWEIGHT	MEDIUM
UNIT OF MEASURE	INCH
X DIMENSION	8.5 INCH
Y DIMENSION	11.0 INCH
SYS CONFIG MENU	
POW SAVE TIME	10 MIN
PERSONALITY	AUTO EMULATION
PARA PS-PROTOCOL	ASCII
USB PS-PROTOCOL	RAW
NET PS-PROTOCOL	RAW
CLRABLE WARNING	ONLINE
AUTO CONTINUE	OFF
MANUAL TIMEOUT	60 SEC
TIMEOUT INJOB	40 SEC
TIMEOUT LOCAL	40 SEC
TIMEOUT NET	90 SEC
LOW TONER	CONTINUE
JAM RECOVERY	ON
ERROR REPORT	OFF
START UP	OFF
PCL EMULATION	
FONT SOURCE	RESIDENT
FONT NO.	I0
FONT PITCH	10.00 CPI
SYMBOL SET	PC-8
A4 PRINT WIDTH	78 COLUMN
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LF FUNCTION	LF
PRINT MARGIN	NORMAL
PEN WIDTH ADJUST	ON
TRAY ID#	
PCL T0ID	4
PCL T1ID	1
PPR EMULATION	
CHARACTER PITCH	10 CPI
FONT CONDENSE	12CPI TO 20CPI
CHARACTER SET	SET-2
SYMBOL SET	IBM-437
LETTER O STYLE	DISABLE
ZERO CHARACTER	NORMAL
LINE PITCH	6 LPI
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LF FUNCTION	LF
LINE LENGTH	80 COLUMN
FORM LENGTH	11 INCH
TOF POSITION	0.0 INCH
LEFT MARGIN	0.0 INCH
FIT TO LETTER	ENABLE
TEXT HEIGHT	SAME
FX EMULATION	
CHARACTER PITCH	10 CPI
CHARACTER SET	SET-2
SYMBOL SET	IBM-437
LETTER O STYLE	DISABLE
ZERO CHARACTER	NORMAL
LINE PITCH	6 LPI
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LINE LENGTH	80 COLUMN
FORM LENGTH	11 INCH
TOF POSITION	0.0 INCH
LEFT MARGIN	0.0 INCH
FIT TO LETTER	ENABLE
TEXT HEIGHT	SAME
PARALLEL MENU	
PARALLEL	ENABLE
BI-DIRECTION	ENABLE
ECP	ENABLE
ACK WIDTH	NARROW
ACK/BUSY TIMING	ACK IN BUSY
I-PRIME	DISABLE
OFFLINE RECEIVE	DISABLE
USB MENU	
USB	ENABLE
SOFT RESET	DISABLE
SPEED	480Mbps
OFFLINE RECEIVE	DISABLE
SERIAL NUMBER	ENABLE
NETWORK MENU	

B430 Menu MAP print pattern (For ODA) -2/2 (reduction : XX%)

OKI
PRINTING SOLUTIONS

B430 – DIGITAL LED PRINTER

PRINT MENU MAP

B430

Printer Serial Number:BETA10530000 Printer Asset Number:
CU version:C0.92 [I01.18 U00.51 S3.1.1h B00.50 PPC405PS 297MHz 000 00000000 00000000 00000000 F50 J0]
PU version:00.00.97 [PI02.08] ET:01000000
PCL Program version:04.36 [04.30 X03.18 P00.44 F00.40] PSE Program version:3015, PSE10
DUPLEX:installed TRAY1:LETTER
Total Memory Size:64 MB Language format:1.3
Flash Memory:8 MB [F50]
ODA LCD:T1 DPR:1.5 58
Network version:t0.06 Web Remote:00.06

ENGINE:2144 T:0, I:0

TCP/IP	ENABLE
IP VERSION	IP v4
NETBEUI	ENABLE
NETWARE	ENABLE
ETHERTALK	ENABLE
FRAME TYPE	AUTO
IP ADDRESS SET	AUTO
IP ADDRESS	192.168.100.100
SUBNET MASK	255.255.255.0
GATEWAY ADDRESS	0.0.0.0
WEB	ENABLE
TELNET	DISABLE
FTP	DISABLE
SNMP	ENABLE
NETWORK SCALE	NORMAL
HUB LINK SETTING	AUTO NEGOTIATE
FACTORY DEFAULTS	
PRINT STATISTICS	
USAGE REPORT	ENABLE
RESET COUNTER	
GROUP COUNTER	DISABLE
CHANGE PASSWORD	
MAINTENANCE MENU	
MENU RESET	
SAVE MENU	
POWER SAVE	ENABLE
PAPER BLACK SET	0
DARKNESS	0
CLEANING	
USAGE MENU	
DRUM LIFE	REMAINING 99 %
TONER (1.5K)	REMAINING 100 %

B410 Menu MAP print pattern (For OEL) -1/2 (reduction : XX%)

OKI PRINTING SOLUTIONS

B410 – DIGITAL LED PRINTER

PRINT MENU MAP

B410

Printer Serial Number: Printer Asset Number:
CU version:A0.92 [I01.18 U00.51 S3.1.1h B00.50 PPC405PS 297MHz 000 00000000 00000000 00000000 F50 J0]
PU version:00.00.97 [PI02.08] ET:01000000
PCL Program version:04.36 [04.30 X03.18 P00.44 F00.40]
DUPLEX:installed TRAY1:A4
Total Memory Size:32 MB Language format:1.3
Flash Memory:2 MB [F50]
OEL LCD:T2
Network version:t0.06 Web Remote:00.06

ENGINE:93 T:0, I:0

INFORMATION MENU	
PRINT MENU MAP	
NETWORK	
PRINT FILE LIST	
PRINT PCL FONT	
PRINT PPR FONT	
PRINT FX FONT	
DEMO1	
PRINT ERROR LOG	
USAGE REPORT	
PRINT MENU	
COPIES	1
DUPLEX	OFF
MANUAL	OFF
PAPER FEED	TRAY1
AUTO TRAY SWITCH	ON
TRAY SEQUENCE	DOWN
MEDIA CHECK	ENABLE
RESOLUTION	600DPI
TONER SAVE MODE	DISABLE
ORIENTATION	PORTRAIT
LINES PER PAGE	64 LINES
EDIT SIZE	CASSETTE SIZE
MEDIA MENU	
TRAY1 PAPERSIZE	A4
TRAY1 MEDIATYPE	PLAIN
TRAY1MEDIAWEIGHT	MEDIUM
MN PAPERSIZE	A4
MN MEDIATYPE	PLAIN
MN MEDIAWEIGHT	MEDIUM
UNIT OF MEASURE	MILLIMETER
X DIMENSION	210 MILLIMETER
Y DIMENSION	297 MILLIMETER
SYS CONFIG MENU	
POW SAVE TIME	10 MIN
PERSONALITY	AUTO EMULATION
CLRABLE WARNING	ONLINE
AUTO CONTINUE	ON
MANUAL TIMEOUT	60 SEC
TIMEOUT INJOB	40 SEC
TIMEOUT LOCAL	40 SEC
TIMEOUT NET	90 SEC
LOW TONER	CONTINUE
JAM RECOVERY	ON
ERROR REPORT	OFF
PCL EMULATION	
FONT SOURCE	RESIDENT
FONT NO.	I0
FONT PITCH	10.00 CPI
SYMBOL SET	PC-8
A4 PRINT WIDTH	78 COLUMN
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LF FUNCTION	LF
PRINT MARGIN	NORMAL
PEN WIDTH ADJUST	ON
TRAY ID#	
PCL MNID	2
PCL T0ID	4
PCL T1ID	1
PPR EMULATION	
CHARACTER PITCH	10 CPI
FONT CONDENSE	12CPI TO 20CPI
CHARACTER SET	SET-2
SYMBOL SET	IBM-437
LETTER O STYLE	DISABLE
ZERO CHARACTER	NORMAL
LINE PITCH	6 LPI
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LF FUNCTION	LF
LINE LENGTH	80 COLUMN
FORM LENGTH	11.7 INCH
TOF POSITION	0.0 INCH
LEFT MARGIN	0.0 INCH
FIT TO LETTER	DISABLE
TEXT HEIGHT	SAME
FX EMULATION	
CHARACTER PITCH	10 CPI
CHARACTER SET	SET-2
SYMBOL SET	IBM-437
LETTER O STYLE	DISABLE
ZERO CHARACTER	NORMAL
LINE PITCH	6 LPI
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LINE LENGTH	80 COLUMN
FORM LENGTH	11.7 INCH
TOF POSITION	0.0 INCH
LEFT MARGIN	0.0 INCH
FIT TO LETTER	DISABLE
TEXT HEIGHT	SAME
PARALLEL MENU	
PARALLEL	ENABLE
BI-DIRECTION	ENABLE
ECP	ENABLE
ACK WIDTH	NARROW
ACK/BUSY TIMING	ACK IN BUSY
I-PRIME	3 MICRO SEC
USB MENU	
USB	ENABLE
SOFT RESET	ENABLE
SPEED	480Mbps
SERIAL NUMBER	ENABLE
NETWORK MENU	
TCP/IP	ENABLE
IP VERSION	IP v4
NETBEUI	ENABLE
NETWARE	ENABLE
ETHERTALK	ENABLE
FRAME TYPE	AUTO
IP ADDRESS SET	AUTO
IP ADDRESS	192.168.100.100

B410 Menu MAP print pattern (For OEL) -2/2 (reduction : XX%)

OKI
PRINTING SOLUTIONS

B410 – DIGITAL LED PRINTER

PRINT MENU MAP

B410

Printer Serial Number: Printer Asset Number:
CU version:A0.92 [I01.18 U00.51 S3.1.1h B00.50 PPC405PS 297MHz 000 00000000 00000000 00000000 F50 J0]
PU version:00.00.97 [PI02.08] ET:01000000
PCL Program version:04.36 [04.30 X03.18 P00.44 F00.40]
DUPLEX:installed TRAY1:A4
Total Memory Size:32 MB Language format:1.3
Flash Memory:2 MB [F50]
OEL LCD:T2
Network version:t0.06 Web Remote:00.06

ENGINE:93 T:0, I:0

SUBNET MASK	255.255.255.0
GATEWAY ADDRESS	0.0.0.0
WEB	ENABLE
TELNET	DISABLE
FTP	DISABLE
SNMP	ENABLE
NETWORK SCALE	NORMAL
HUB LINK SETTING	AUTO NEGOTIATE
FACTORY DEFAULTS	
PRINT STATISTICS	
USAGE REPORT	ENABLE
RESET COUNTER	
GROUP COUNTER	DISABLE
CHANGE PASSWORD	
MAINTENANCE MENU	
MENU RESET	
SAVE MENU	
POWER SAVE	ENABLE
PAPER BLACK SET	0
DARKNESS	0
CLEANING	
USAGE MENU	
DRUM LIFE	REMAINING 99 %
TONER (1.5K)	REMAINING 100 %

B430 Menu MAP print pattern (For OEL) -2/2 (reduction : XX%)

OKI PRINTING SOLUTIONS

B430 – DIGITAL LED PRINTER

PRINT MENU MAP

B430

Printer Serial Number:BETA10530000 Printer Asset Number:
CU version:C0.92 [I01.18 U00.51 S3.1.1h B00.50 PPC405PS 297MHz 000 00000000 00000000 00000000 F50 J0]
PU version:00.00.97 [PI02.08] ET:01000000
PCL Program version:04.36 [04.30 X03.18 P00.44 F00.40] PSE Program version:3015, PSE10
DUPLEX:installed TRAY1:A4
Total Memory Size:64 MB
Language format:1.3
Flash Memory:8 MB [F50]
OEL LCD:T2 DPR:1.5 58
Network version:t0.06 Web Remote:00.06

ENGINE:2140 T:0, I:0

INFORMATION MENU	
PRINT MENU MAP	
NETWORK	
PRINT FILE LIST	
PRINT PCL FONT	
PRINT PSE FONT	
PRINT PPR FONT	
PRINT FX FONT	
DEMO1	
PRINT ERROR LOG	
USAGE REPORT	
SHUTDOWN MENU	
SHUTDOWN START	
PRINT MENU	
COPIES	1
DUPLEX	OFF
PAPER FEED	TRAY1
AUTO TRAY SWITCH	ON
TRAY SEQUENCE	DOWN
MP TRAY USAGE	DO NOT USE
MEDIA CHECK	ENABLE
RESOLUTION	600DPI
TONER SAVE MODE	DISABLE
ORIENTATION	PORTRAIT
LINES PER PAGE	64 LINES
EDIT SIZE	CASSETTE SIZE
MEDIA MENU	
TRAY1 PAPERSIZE	A4
TRAY1 MEDIATYPE	PLAIN
TRAY1MEDIAWEIGHT	MEDIUM
MPT PAPERSIZE	A4
MPT MEDIATYPE	PLAIN
MPT MEDIAWEIGHT	MEDIUM
UNIT OF MEASURE	MILLIMETER
X DIMENSION	210 MILLIMETER
Y DIMENSION	297 MILLIMETER
SYS CONFIG MENU	
POW SAVE TIME	10 MIN
PERSONALITY	AUTO EMULATION
PARA PS-PROTOCOL	ASCII
USB PS-PROTOCOL	RAW
NET PS-PROTOCOL	RAW
CLRABLE WARNING	ONLINE
AUTO CONTINUE	OFF
MANUAL TIMEOUT	60 SEC
TIMEOUT INJOB	40 SEC
TIMEOUT LOCAL	40 SEC
TIMEOUT NET	90 SEC
LOW TONER	CONTINUE
JAM RECOVERY	ON
ERROR REPORT	OFF
START UP	OFF
PCL EMULATION	
FONT SOURCE	RESIDENT
FONT NO.	I0
FONT PITCH	10.00 CPI
SYMBOL SET	PC-8
A4 PRINT WIDTH	78 COLUMN
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LF FUNCTION	LF
PRINT MARGIN	NORMAL
PEN WIDTH ADJUST	ON
TRAY ID#	
PCL T0ID	4
PCL T1ID	1
PPR EMULATION	
CHARACTER PITCH	10 CPI
FONT CONDENSE	12CPI TO 20CPI
CHARACTER SET	SET-2
SYMBOL SET	IBM-437
LETTER O STYLE	DISABLE
ZERO CHARACTER	NORMAL
LINE PITCH	6 LPI
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LF FUNCTION	LF
LINE LENGTH	80 COLUMN
FORM LENGTH	11.7 INCH
TOF POSITION	0.0 INCH
LEFT MARGIN	0.0 INCH
FIT TO LETTER	DISABLE
TEXT HEIGHT	SAME
FX EMULATION	
CHARACTER PITCH	10 CPI
CHARACTER SET	SET-2
SYMBOL SET	IBM-437
LETTER O STYLE	DISABLE
ZERO CHARACTER	NORMAL
LINE PITCH	6 LPI
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LINE LENGTH	80 COLUMN
FORM LENGTH	11.7 INCH
TOF POSITION	0.0 INCH
LEFT MARGIN	0.0 INCH
FIT TO LETTER	DISABLE
TEXT HEIGHT	SAME
PARALLEL MENU	
PARALLEL	ENABLE
BI-DIRECTION	ENABLE
ECP	ENABLE
ACK WIDTH	NARROW
ACK/BUSY TIMING	ACK IN BUSY
I-PRIME	DISABLE
OFFLINE RECEIVE	DISABLE
USB MENU	
USB	ENABLE
SOFT RESET	DISABLE
SPEED	480Mbps
OFFLINE RECEIVE	DISABLE
SERIAL NUMBER	ENABLE
NETWORK MENU	

B430 Menu MAP print pattern (For OEL) -2/2 (reduction : XX%)

OKI
PRINTING SOLUTIONS

B430 – DIGITAL LED PRINTER

PRINT MENU MAP

B430

Printer Serial Number:BETA10530000 Printer Asset Number:
CU version:C0.92 [I01.18 U00.51 S3.1.1h B00.50 PPC405PS 297MHz 000 00000000 00000000 00000000 F50 J0]
PU version:00.00.97 [PI02.08] ET:01000000
PCL Program version:04.36 [04.30 X03.18 P00.44 F00.40] PSE Program version:3015, PSE10
DUPLEX:installed TRAY1:A4
Total Memory Size:64 MB Language format:1.3
Flash Memory:8 MB [F50]
OEL LCD:T2 DPR:1.5 58
Network version:t0.06 Web Remote:00.06

ENGINE:2140 T:0, I:0

TCP/IP	ENABLE
IP VERSION	IP v4
NETBEUI	ENABLE
NETWARE	ENABLE
ETHERTALK	ENABLE
FRAME TYPE	AUTO
IP ADDRESS SET	AUTO
IP ADDRESS	192.168.100.100
SUBNET MASK	255.255.255.0
GATEWAY ADDRESS	0.0.0.0
WEB	ENABLE
TELNET	DISABLE
FTP	DISABLE
SNMP	ENABLE
NETWORK SCALE	NORMAL
HUB LINK SETTING	AUTO NEGOTIATE
FACTORY DEFAULTS	
PRINT STATISTICS	
USAGE REPORT	ENABLE
RESET COUNTER	
GROUP COUNTER	DISABLE
CHANGE PASSWORD	
MAINTENANCE MENU	
MENU RESET	
SAVE MENU	
POWER SAVE	ENABLE
PAPER BLACK SET	0
DARKNESS	0
CLEANING	
USAGE MENU	
DRUM LIFE	REMAINING 99 %
TONER (1.5K)	REMAINING 100 %

B440 Menu MAP print pattern (For OEL) -1/2 (reduction : XX%)

OKI PRINTING SOLUTIONS

B440 – DIGITAL LED PRINTER

PRINT MENU MAP

B440

Printer Serial Number:BETA10530000 Printer Asset Number:
CU version:C0.92 [I01.18 U00.51 S3.1.1h B00.50 PPC405PS 297MHz 000 00000000 00000000 00000000 F50 J0]
PU version:00.00.97 [PI02.08] ET:01000000
PCL Program version:04.36 [04.30 X03.18 P00.44 F00.40] PSE Program version:3015, PSE10
DUPLEX:installed TRAY1:A4
Total Memory Size:64 MB Language format:1.3
Flash Memory:8 MB [F50]
OEL LCD:T2 DPR:1.5 58
Network version:t0.06 Web Remote:00.06

ENGINE:2199 T:0, I:0

INFORMATION MENU	
PRINT MENU MAP	
NETWORK	
PRINT FILE LIST	
PRINT PCL FONT	
PRINT PSE FONT	
PRINT PPR FONT	
PRINT FX FONT	
DEMO1	
PRINT ERROR LOG	
USAGE REPORT	
SHUTDOWN MENU	
SHUTDOWN START	
PRINT MENU	
COPIES	1
DUPLEX	OFF
PAPER FEED	TRAY1
AUTO TRAY SWITCH	ON
TRAY SEQUENCE	DOWN
MP TRAY USAGE	DO NOT USE
MEDIA CHECK	ENABLE
RESOLUTION	600DPI
TONER SAVE MODE	DISABLE
ORIENTATION	PORTRAIT
LINES PER PAGE	64 LINES
EDIT SIZE	CASSETTE SIZE
MEDIA MENU	
TRAY1 PAPERSIZE	A4
TRAY1 MEDIATYPE	PLAIN
TRAY1MEDIAWEIGHT	MEDIUM
MPT PAPERSIZE	A4
MPT MEDIATYPE	PLAIN
MPT MEDIAWEIGHT	MEDIUM
UNIT OF MEASURE	MILLIMETER
X DIMENSION	210 MILLIMETER
Y DIMENSION	297 MILLIMETER
SYS CONFIG MENU	
POW SAVE TIME	10 MIN
PERSONALITY	AUTO EMULATION
PARA PS-PROTOCOL	ASCII
USB PS-PROTOCOL	RAW
NET PS-PROTOCOL	RAW
CLRABLE WARNING	ONLINE
AUTO CONTINUE	OFF
MANUAL TIMEOUT	60 SEC
TIMEOUT INJOB	40 SEC
TIMEOUT LOCAL	40 SEC
TIMEOUT NET	90 SEC
LOW TONER	CONTINUE
JAM RECOVERY	ON
ERROR REPORT	OFF
START UP	OFF
PCL EMULATION	
FONT SOURCE	RESIDENT
FONT NO.	I0
FONT PITCH	10.00 CPI
SYMBOL SET	PC-8
A4 PRINT WIDTH	78 COLUMN
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LF FUNCTION	LF
PRINT MARGIN	NORMAL
PEN WIDTH ADJUST	ON
TRAY ID#	
PCL T0ID	4
PCL T1ID	1
PPR EMULATION	
CHARACTER PITCH	10 CPI
FONT CONDENSE	12CPI TO 20CPI
CHARACTER SET	SET-2
SYMBOL SET	IBM-437
LETTER O STYLE	DISABLE
ZERO CHARACTER	NORMAL
LINE PITCH	6 LPI
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LF FUNCTION	LF
LINE LENGTH	80 COLUMN
FORM LENGTH	11.7 INCH
TOF POSITION	0.0 INCH
LEFT MARGIN	0.0 INCH
FIT TO LETTER	DISABLE
TEXT HEIGHT	SAME
FX EMULATION	
CHARACTER PITCH	10 CPI
CHARACTER SET	SET-2
SYMBOL SET	IBM-437
LETTER O STYLE	DISABLE
ZERO CHARACTER	NORMAL
LINE PITCH	6 LPI
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LINE LENGTH	80 COLUMN
FORM LENGTH	11.7 INCH
TOF POSITION	0.0 INCH
LEFT MARGIN	0.0 INCH
FIT TO LETTER	DISABLE
TEXT HEIGHT	SAME
PARALLEL MENU	
PARALLEL	ENABLE
BI-DIRECTION	ENABLE
ECP	ENABLE
ACK WIDTH	NARROW
ACK/BUSY TIMING	ACK IN BUSY
I-PRIME	DISABLE
OFFLINE RECEIVE	DISABLE
USB MENU	
USB	ENABLE
SOFT RESET	DISABLE
SPEED	480Mbps
OFFLINE RECEIVE	DISABLE
SERIAL NUMBER	ENABLE
NETWORK MENU	

B440 Menu MAP print pattern (For OEL) -2/2 (reduction : XX%)

OKI
PRINTING SOLUTIONS

B440 – DIGITAL LED PRINTER

PRINT MENU MAP

B440

Printer Serial Number:BETA10530000 Printer Asset Number:
CU version:C0.92 [I01.18 U00.51 S3.1.1h B00.50 PPC405PS 297MHz 000 00000000 00000000 00000000 F50 J0]
PU version:00.00.97 [PI02.08] ET:01000000
PCL Program version:04.36 [04.30 X03.18 P00.44 F00.40] PSE Program version:3015, PSE10
DUPLEX:installed TRAY1:A4
Total Memory Size:64 MB Language format:1.3
Flash Memory:8 MB [F50]
OEL LCD:T2 DPR:1.5 58
Network version:t0.06 Web Remote:00.06

ENGINE:2199 T:0, I:0

TCP/IP	ENABLE
IP VERSION	IP v4
NETBEUI	ENABLE
NETWARE	ENABLE
ETHERTALK	ENABLE
FRAME TYPE	AUTO
IP ADDRESS SET	AUTO
IP ADDRESS	192.168.100.100
SUBNET MASK	255.255.255.0
GATEWAY ADDRESS	0.0.0.0
WEB	ENABLE
TELNET	DISABLE
FTP	DISABLE
SNMP	ENABLE
NETWORK SCALE	NORMAL
HUB LINK SETTING	AUTO NEGOTIATE
FACTORY DEFAULTS	
PRINT STATISTICS	
USAGE REPORT	ENABLE
RESET COUNTER	
GROUP COUNTER	DISABLE
CHANGE PASSWORD	
MAINTENANCE MENU	
MENU RESET	
SAVE MENU	
POWER SAVE	ENABLE
PAPER BLACK SET	0
DARKNESS	0
CLEANING	
USAGE MENU	
DRUM LIFE	REMAINING 99 %
TONER (1.5K)	REMAINING 100 %

410 Menu MAP print pattern (For AOS) -1/2 (reduction : XX%)

OKI PRINTING SOLUTIONS

B410 – DIGITAL LED PRINTER

PRINT MENU MAP

B410

Printer Serial Number: Printer Asset Number:
CU version:A0.92 [I01.18 U00.51 S3.1.1h B00.50 PPC405PS 297MHz 000 00000000 00000000 00000000 F50 J0]
PU version:00.00.97 [PI02.08] ET:01000000
PCL Program version:04.36 [04.30 X03.18 P00.44 F00.40]
DUPLEX:installed TRAY1:A4
Total Memory Size:32 MB Language format:1.3
Flash Memory:2 MB [F50]
APS LCD:T2
Network version:t0.06 Web Remote:00.06

ENGINE:70 T:0, I:0

INFORMATION MENU	
PRINT MENU MAP	
NETWORK	
PRINT FILE LIST	
PRINT PCL FONT	
PRINT PPR FONT	
PRINT FX FONT	
DEMO1	
PRINT ERROR LOG	
USAGE REPORT	
PRINT MENU	
COPIES	1
DUPLEX	OFF
MANUAL	OFF
PAPER FEED	TRAY1
AUTO TRAY SWITCH	ON
TRAY SEQUENCE	DOWN
MEDIA CHECK	ENABLE
RESOLUTION	600DPI
TONER SAVE MODE	DISABLE
ORIENTATION	PORTRAIT
LINES PER PAGE	64 LINES
EDIT SIZE	CASSETTE SIZE
MEDIA MENU	
TRAY1 PAPERSIZE	A4
TRAY1 MEDIATYPE	PLAIN
TRAY1MEDIAWEIGHT	MEDIUM
MN PAPERSIZE	A4
MN MEDIATYPE	PLAIN
MN MEDIAWEIGHT	MEDIUM
UNIT OF MEASURE	MILLIMETER
X DIMENSION	210 MILLIMETER
Y DIMENSION	297 MILLIMETER
SYS CONFIG MENU	
POW SAVE TIME	10 MIN
PERSONALITY	AUTO EMULATION
CLRABLE WARNING	ONLINE
AUTO CONTINUE	ON
MANUAL TIMEOUT	60 SEC
TIMEOUT INJOB	40 SEC
TIMEOUT LOCAL	40 SEC
TIMEOUT NET	90 SEC
LOW TONER	CONTINUE
JAM RECOVERY	ON
ERROR REPORT	OFF
PCL EMULATION	
FONT SOURCE	RESIDENT
FONT NO.	I0
FONT PITCH	10.00 CPI
SYMBOL SET	PC-8
A4 PRINT WIDTH	78 COLUMN
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LF FUNCTION	LF
PRINT MARGIN	NORMAL
PEN WIDTH ADJUST	ON
TRAY ID#	
PCL MNID	2
PCL T0ID	4
PCL T1ID	1
PPR EMULATION	
CHARACTER PITCH	10 CPI
FONT CONDENSE	12CPI TO 20CPI
CHARACTER SET	SET-2
SYMBOL SET	IBM-437
LETTER O STYLE	DISABLE
ZERO CHARACTER	NORMAL
LINE PITCH	6 LPI
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LF FUNCTION	LF
LINE LENGTH	80 COLUMN
FORM LENGTH	11.7 INCH
TOF POSITION	0.0 INCH
LEFT MARGIN	0.0 INCH
FIT TO LETTER	DISABLE
TEXT HEIGHT	SAME
FX EMULATION	
CHARACTER PITCH	10 CPI
CHARACTER SET	SET-2
SYMBOL SET	IBM-437
LETTER O STYLE	DISABLE
ZERO CHARACTER	NORMAL
LINE PITCH	6 LPI
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LINE LENGTH	80 COLUMN
FORM LENGTH	11.7 INCH
TOF POSITION	0.0 INCH
LEFT MARGIN	0.0 INCH
FIT TO LETTER	DISABLE
TEXT HEIGHT	SAME
PARALLEL MENU	
PARALLEL	ENABLE
BI-DIRECTION	ENABLE
ECP	ENABLE
ACK WIDTH	NARROW
ACK/BUSY TIMING	ACK IN BUSY
I-PRIME	3 MICRO SEC
USB MENU	
USB	ENABLE
SOFT RESET	ENABLE
SPEED	480Mbps
SERIAL NUMBER	ENABLE
NETWORK MENU	
TCP/IP	ENABLE
IP VERSION	IP v4
NETBEUI	ENABLE
NETWARE	ENABLE
ETHERTALK	ENABLE
FRAME TYPE	AUTO
IP ADDRESS SET	AUTO
IP ADDRESS	192.168.100.100

B410 Menu MAP print pattern (For AOS) -2/2 (reduction : XX%)

OKI
PRINTING SOLUTIONS

B410 – DIGITAL LED PRINTER

PRINT MENU MAP

B410

Printer Serial Number: Printer Asset Number:
CU version:A0.92 [I01.18 U00.51 S3.1.1h B00.50 PPC405PS 297MHz 000 00000000 00000000 00000000 F50 J0]
PU version:00.00.97 [PI02.08] ET:01000000
PCL Program version:04.36 [04.30 X03.18 P00.44 F00.40]
DUPLEX:installed TRAY1:A4
Total Memory Size:32 MB Language format:1.3
Flash Memory:2 MB [F50]
APS LCD:T2
Network version:t0.06 Web Remote:00.06

ENGINE:70 T:0, I:0

SUBNET MASK	255.255.255.0
GATEWAY ADDRESS	0.0.0.0
WEB	ENABLE
TELNET	DISABLE
FTP	DISABLE
SNMP	ENABLE
NETWORK SCALE	NORMAL
HUB LINK SETTING	AUTO NEGOTIATE
FACTORY DEFAULTS	
PRINT STATISTICS	
USAGE REPORT	ENABLE
RESET COUNTER	
GROUP COUNTER	DISABLE
CHANGE PASSWORD	
MAINTENANCE MENU	
MENU RESET	
SAVE MENU	
POWER SAVE	ENABLE
PAPER BLACK SET	0
DARKNESS	0
CLEANING	
USAGE MENU	
DRUM LIFE	REMAINING 99 %
TONER (1.5K)	REMAINING 90 %

B430 Menu MAP print pattern (For AOS) -1/2 (reduction : XX%)

OKI PRINTING SOLUTIONS

B430 – DIGITAL LED PRINTER

PRINT MENU MAP

B430

Printer Serial Number:BETA10530000 Printer Asset Number:
CU version:C0.92 [I01.18 U00.51 S3.1.1h B00.50 PPC405PS 297MHz 000 00000000 00000000 00000000 F50 J0]
PU version:00.00.97 [PI02.08] ET:01000000
PCL Program version:04.36 [04.30 X03.18 P00.44 F00.40] PSE Program version:3015, PSE10
DUPLEX:installed TRAY1:A4
Total Memory Size:64 MB Language format:1.3
Flash Memory:8 MB [F50]
APS LCD:T2 DPR:1.5 58
Network version:t0.06 Web Remote:00.06

ENGINE:2166 T:0, I:0

INFORMATION MENU	
PRINT MENU MAP	
NETWORK	
PRINT FILE LIST	
PRINT PCL FONT	
PRINT PSE FONT	
PRINT PPR FONT	
PRINT FX FONT	
DEMO1	
PRINT ERROR LOG	
USAGE REPORT	
SHUTDOWN MENU	
SHUTDOWN START	
PRINT MENU	
COPIES	1
DUPLEX	OFF
PAPER FEED	TRAY1
AUTO TRAY SWITCH	ON
TRAY SEQUENCE	DOWN
MP TRAY USAGE	DO NOT USE
MEDIA CHECK	ENABLE
RESOLUTION	600DPI
TONER SAVE MODE	DISABLE
ORIENTATION	PORTRAIT
LINES PER PAGE	64 LINES
EDIT SIZE	CASSETTE SIZE
MEDIA MENU	
TRAY1 PAPERSIZE	A4
TRAY1 MEDIATYPE	PLAIN
TRAY1MEDIAWEIGHT	MEDIUM
MPT PAPERSIZE	A4
MPT MEDIATYPE	PLAIN
MPT MEDIAWEIGHT	MEDIUM
UNIT OF MEASURE	MILLIMETER
X DIMENSION	210 MILLIMETER
Y DIMENSION	297 MILLIMETER
SYS CONFIG MENU	
POW SAVE TIME	10 MIN
PERSONALITY	AUTO EMULATION
PARA PS-PROTOCOL	ASCII
USB PS-PROTOCOL	RAW
NET PS-PROTOCOL	RAW
CLRABLE WARNING	ONLINE
AUTO CONTINUE	OFF
MANUAL TIMEOUT	60 SEC
TIMEOUT INJOB	40 SEC
TIMEOUT LOCAL	40 SEC
TIMEOUT NET	90 SEC
LOW TONER	CONTINUE
JAM RECOVERY	ON
ERROR REPORT	OFF
START UP	OFF
PCL EMULATION	
FONT SOURCE	RESIDENT
FONT NO.	I0
FONT PITCH	10.00 CPI
SYMBOL SET	PC-8
A4 PRINT WIDTH	78 COLUMN
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LF FUNCTION	LF
PRINT MARGIN	NORMAL
PEN WIDTH ADJUST	ON
TRAY ID#	
PCL T0ID	4
PCL T1ID	1
PPR EMULATION	
CHARACTER PITCH	10 CPI
FONT CONDENSE	12CPI TO 20CPI
CHARACTER SET	SET-2
SYMBOL SET	IBM-437
LETTER O STYLE	DISABLE
ZERO CHARACTER	NORMAL
LINE PITCH	6 LPI
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LF FUNCTION	LF
LINE LENGTH	80 COLUMN
FORM LENGTH	11.7 INCH
TOF POSITION	0.0 INCH
LEFT MARGIN	0.0 INCH
FIT TO LETTER	DISABLE
TEXT HEIGHT	SAME
FX EMULATION	
CHARACTER PITCH	10 CPI
CHARACTER SET	SET-2
SYMBOL SET	IBM-437
LETTER O STYLE	DISABLE
ZERO CHARACTER	NORMAL
LINE PITCH	6 LPI
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LINE LENGTH	80 COLUMN
FORM LENGTH	11.7 INCH
TOF POSITION	0.0 INCH
LEFT MARGIN	0.0 INCH
FIT TO LETTER	DISABLE
TEXT HEIGHT	SAME
PARALLEL MENU	
PARALLEL	ENABLE
BI-DIRECTION	ENABLE
ECP	ENABLE
ACK WIDTH	NARROW
ACK/BUSY TIMING	ACK IN BUSY
I-PRIME	DISABLE
OFFLINE RECEIVE	DISABLE
USB MENU	
USB	ENABLE
SOFT RESET	DISABLE
SPEED	480Mbps
OFFLINE RECEIVE	DISABLE
SERIAL NUMBER	ENABLE
NETWORK MENU	

B430 Menu MAP print pattern (For AOS) -2/2 (reduction : XX%)

OKI
PRINTING SOLUTIONS

B430 – DIGITAL LED PRINTER

PRINT MENU MAP

B430

Printer Serial Number:BETA10530000 Printer Asset Number:
CU version:C0.92 [I01.18 U00.51 S3.1.1h B00.50 PPC405PS 297MHz 000 00000000 00000000 00000000 F50 J0]
PU version:00.00.97 [PI02.08] ET:01000000
PCL Program version:04.36 [04.30 X03.18 P00.44 F00.40] PSE Program version:3015, PSE10
DUPLEX:installed TRAY1:A4
Total Memory Size:64 MB Language format:1.3
Flash Memory:8 MB [F50]
APS LCD:T2 DPR:1.5 58
Network version:t0.06 Web Remote:00.06

ENGINE:2166 T:0, I:0

TCP/IP	ENABLE
IP VERSION	IP v4
NETBEUI	ENABLE
NETWARE	ENABLE
ETHERTALK	ENABLE
FRAME TYPE	AUTO
IP ADDRESS SET	AUTO
IP ADDRESS	192.168.100.100
SUBNET MASK	255.255.255.0
GATEWAY ADDRESS	0.0.0.0
WEB	ENABLE
TELNET	DISABLE
FTP	DISABLE
SNMP	ENABLE
NETWORK SCALE	NORMAL
HUB LINK SETTING	AUTO NEGOTIATE
FACTORY DEFAULTS	
PRINT STATISTICS	
USAGE REPORT	ENABLE
RESET COUNTER	
GROUP COUNTER	DISABLE
CHANGE PASSWORD	
MAINTENANCE MENU	
MENU RESET	
SAVE MENU	
POWER SAVE	ENABLE
PAPER BLACK SET	0
DARKNESS	0
CLEANING	
USAGE MENU	
DRUM LIFE	REMAINING 99 %
TONER (1.5K)	REMAINING 100 %

440 Menu MAP print pattern (For AOS) -1/2 (reduction : XX%)

OKI PRINTING SOLUTIONS

B440 – DIGITAL LED PRINTER

PRINT MENU MAP

B440

Printer Serial Number:BETA10530000 Printer Asset Number:
CU version:C0.92 [I01.18 U00.51 S3.1.1h B00.50 PPC405PS 297MHz 000 00000000 00000000 00000000 F50 J0]
PU version:00.00.97 [PI02.08] ET:01000000
PCL Program version:04.36 [04.30 X03.18 P00.44 F00.40] PSE Program version:3015, PSE10
DUPLEX:installed TRAY1:A4
Total Memory Size:64 MB Language format:1.3
Flash Memory:8 MB [F50]
APS LCD:T2 DPR:1.5 58
Network version:t0.06 Web Remote:00.06

ENGINE:2178 T:0, I:0

INFORMATION MENU	
PRINT MENU MAP	
NETWORK	
PRINT FILE LIST	
PRINT PCL FONT	
PRINT PSE FONT	
PRINT PPR FONT	
PRINT FX FONT	
DEMO1	
PRINT ERROR LOG	
USAGE REPORT	
SHUTDOWN MENU	
SHUTDOWN START	
PRINT MENU	
COPIES	1
DUPLEX	OFF
PAPER FEED	TRAY1
AUTO TRAY SWITCH	ON
TRAY SEQUENCE	DOWN
MP TRAY USAGE	DO NOT USE
MEDIA CHECK	ENABLE
RESOLUTION	600DPI
TONER SAVE MODE	DISABLE
ORIENTATION	PORTRAIT
LINES PER PAGE	64 LINES
EDIT SIZE	CASSETTE SIZE
MEDIA MENU	
TRAY1 PAPERSIZE	A4
TRAY1 MEDIATYPE	PLAIN
TRAY1MEDIAWEIGHT	MEDIUM
MPT PAPERSIZE	A4
MPT MEDIATYPE	PLAIN
MPT MEDIAWEIGHT	MEDIUM
UNIT OF MEASURE	MILLIMETER
X DIMENSION	210 MILLIMETER
Y DIMENSION	297 MILLIMETER
SYS CONFIG MENU	
POW SAVE TIME	10 MIN
PERSONALITY	AUTO EMULATION
PARA PS-PROTOCOL	ASCII
USB PS-PROTOCOL	RAW
NET PS-PROTOCOL	RAW
CLRABLE WARNING	ONLINE
AUTO CONTINUE	OFF
MANUAL TIMEOUT	60 SEC
TIMEOUT INJOB	40 SEC
TIMEOUT LOCAL	40 SEC
TIMEOUT NET	90 SEC
LOW TONER	CONTINUE
JAM RECOVERY	ON
ERROR REPORT	OFF
START UP	OFF
PCL EMULATION	
FONT SOURCE	RESIDENT
FONT NO.	I0
FONT PITCH	10.00 CPI
SYMBOL SET	PC-8
A4 PRINT WIDTH	78 COLUMN
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LF FUNCTION	LF
PRINT MARGIN	NORMAL
PEN WIDTH ADJUST	ON
TRAY ID#	
PCL T0ID	4
PCL T1ID	1
PPR EMULATION	
CHARACTER PITCH	10 CPI
FONT CONDENSE	12CPI TO 20CPI
CHARACTER SET	SET-2
SYMBOL SET	IBM-437
LETTER O STYLE	DISABLE
ZERO CHARACTER	NORMAL
LINE PITCH	6 LPI
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LF FUNCTION	LF
LINE LENGTH	80 COLUMN
FORM LENGTH	11.7 INCH
TOF POSITION	0.0 INCH
LEFT MARGIN	0.0 INCH
FIT TO LETTER	DISABLE
TEXT HEIGHT	SAME
FX EMULATION	
CHARACTER PITCH	10 CPI
CHARACTER SET	SET-2
SYMBOL SET	IBM-437
LETTER O STYLE	DISABLE
ZERO CHARACTER	NORMAL
LINE PITCH	6 LPI
WHITE PAGE SKIP	OFF
CR FUNCTION	CR
LINE LENGTH	80 COLUMN
FORM LENGTH	11.7 INCH
TOF POSITION	0.0 INCH
LEFT MARGIN	0.0 INCH
FIT TO LETTER	DISABLE
TEXT HEIGHT	SAME
PARALLEL MENU	
PARALLEL	ENABLE
BI-DIRECTION	ENABLE
ECP	ENABLE
ACK WIDTH	NARROW
ACK/BUSY TIMING	ACK IN BUSY
I-PRIME	DISABLE
OFFLINE RECEIVE	DISABLE
USB MENU	
USB	ENABLE
SOFT RESET	DISABLE
SPEED	480Mbps
OFFLINE RECEIVE	DISABLE
SERIAL NUMBER	ENABLE
NETWORK MENU	

440 Menu MAP print pattern (For AOS) -2/2 (reduction : XX%)

OKI PRINTING SOLUTIONS

B440 – DIGITAL LED PRINTER

PRINT MENU MAP

B440

Printer Serial Number:BETA10530000 Printer Asset Number:
CU version:C0.92 [I01.18 U00.51 S3.1.1h B00.50 PPC405PS 297MHz 000 00000000 00000000 00000000 F50 J0]
PU version:00.00.97 [PI02.08] ET:01000000
PCL Program version:04.36 [04.30 X03.18 P00.44 F00.40] PSE Program version:3015, PSE10
DUPLEX:installed TRAY1:A4
Total Memory Size:64 MB Language format:1.3
Flash Memory:8 MB [F50]
APS LCD:T2 DPR:1.5 58
Network version:t0.06 Web Remote:00.06

ENGINE:2178 T:0, I:0

TCP/IP	ENABLE
IP VERSION	IP v4
NETBEUI	ENABLE
NETWARE	ENABLE
ETHERTALK	ENABLE
FRAME TYPE	AUTO
IP ADDRESS SET	AUTO
IP ADDRESS	192.168.100.100
SUBNET MASK	255.255.255.0
GATEWAY ADDRESS	0.0.0.0
WEB	ENABLE
TELNET	DISABLE
FTP	DISABLE
SNMP	ENABLE
NETWORK SCALE	NORMAL
HUB LINK SETTING	AUTO NEGOTIATE
FACTORY DEFAULTS	
PRINT STATISTICS	
USAGE REPORT	ENABLE
RESET COUNTER	
GROUP COUNTER	DISABLE
CHANGE PASSWORD	
MAINTENANCE MENU	
MENU RESET	
SAVE MENU	
POWER SAVE	ENABLE
PAPER BLACK SET	0
DARKNESS	0
CLEANING	
USAGE MENU	
DRUM LIFE	REMAINING 99 %
TONER (1.5K)	REMAINING 100 %

② PCL FONT print pattern-1/3 (reduction : XX%)

PCL Font List

B440

Symbol Set (for unbound Typeface) ⇔Pitch 0.10 - 593.00 CPI
n Symbol Set (n:Number of Symbol Sets) ⇕Height 0.25 - 999.75 Point

Resident Fonts

Font No. (Font ID)	Typeface	Pitch/Point	Escape Sequence	Print Sample

HP LJ4000/8000 Series Compatible Scalable Fonts

I 000	Courier	Scalable	<esc>(<esc>(s0p⇔h0s0b4099T	ABCDEfghij12345
I 001	**Courier Bold**	Scalable	<esc>(<esc>(s0p⇔h0s3b4099T	**ABCDEfghij12345**
I 002	*Courier Italic*	Scalable	<esc>(<esc>(s0p⇔h1s0b4099T	*ABCDEfghij12345*
I 003	***Courier Bold Italic***	Scalable	<esc>(<esc>(s0p⇔h1s3b4099T	***ABCDEfghij12345***
I 004	CG Times	Scalable	<esc>(<esc>(s1p⇕v0s0b4101T	ABCDEfghij12345
I 005	**CG Times Bold**	Scalable	<esc>(<esc>(s1p⇕v0s3b4101T	**ABCDEfghij12345**
I 006	*CG Times Italic*	Scalable	<esc>(<esc>(s1p⇕v1s0b4101T	*ABCDEfghij12345*
I 007	***CG Times Bold Italic***	Scalable	<esc>(<esc>(s1p⇕v1s3b4101T	***ABCDEfghij12345***
I 008	CG Omega	Scalable	<esc>(<esc>(s1p⇕v0s0b4113T	ABCDEfghij12345
I 009	**CG Omega Bold**	Scalable	<esc>(<esc>(s1p⇕v0s3b4113T	**ABCDEfghij12345**
I 010	*CG Omega Italic*	Scalable	<esc>(<esc>(s1p⇕v1s0b4113T	*ABCDEfghij12345*
I 011	***CG Omega Bold Italic***	Scalable	<esc>(<esc>(s1p⇕v1s3b4113T	***ABCDEfghij12345***
I 012	*Coronet*	Scalable	<esc>(<esc>(s1p⇕v1s0b4116T	*ABCDEfghij12345*
I 013	**Clarendon Condensed**	Scalable	<esc>(<esc>(s1p⇕v4s3b4140T	**ABCDEfghij12345**
I 014	Univers Medium	Scalable	<esc>(<esc>(s1p⇕v0s0b4148T	ABCDEfghij12345
I 015	**Univers Bold**	Scalable	<esc>(<esc>(s1p⇕v0s3b4148T	**ABCDEfghij12345**
I 016	*Univers Medium Italic*	Scalable	<esc>(<esc>(s1p⇕v1s0b4148T	*ABCDEfghij12345*
I 017	***Univers Bold Italic***	Scalable	<esc>(<esc>(s1p⇕v1s3b4148T	***ABCDEfghij12345***
I 018	Univers Medium Condensed	Scalable	<esc>(<esc>(s1p⇕v4s0b4148T	ABCDEfghij12345
I 019	**Univers Bold Condensed**	Scalable	<esc>(<esc>(s1p⇕v4s3b4148T	**ABCDEfghij12345**
I 020	*Univers Medium Condensed Italic*	Scalable	<esc>(<esc>(s1p⇕v5s0b4148T	*ABCDEfghij12345*
I 021	***Univers Bold Condensed Italic***	Scalable	<esc>(<esc>(s1p⇕v5s3b4148T	***ABCDEfghij12345***
I 022	Antique Olive	Scalable	<esc>(<esc>(s1p⇕v0s0b4168T	ABCDEfghij12345
I 023	**Antique Olive Bold**	Scalable	<esc>(<esc>(s1p⇕v0s3b4168T	**ABCDEfghij12345**
I 024	*Antique Olive Italic*	Scalable	<esc>(<esc>(s1p⇕v1s0b4168T	*ABCDEfghij12345*
I 025	Garamond Antiqua	Scalable	<esc>(<esc>(s1p⇕v0s0b4197T	ABCDEfghij12345
I 026	Garamond Halbfett	Scalable	<esc>(<esc>(s1p⇕v0s3b4197T	ABCDEfghij12345
I 027	*Garamond Kursiv*	Scalable	<esc>(<esc>(s1p⇕v1s0b4197T	*ABCDEfghij12345*
I 028	*Garamond Kursiv Halbfett*	Scalable	<esc>(<esc>(s1p⇕v1s3b4197T	*ABCDEfghij12345*
I 029	*Marigold*	Scalable	<esc>(<esc>(s1p⇕v0s0b4297T	*ABCDEfghij12345*
I 030	Albertus Medium	Scalable	<esc>(<esc>(s1p⇕v0s1b4362T	ABCDEfghij12345
I 031	**Albertus Extra Bold**	Scalable	<esc>(<esc>(s1p⇕v0s4b4362T	**ABCDEfghij12345**
I 032	Letter Gothic	Scalable	<esc>(<esc>(s0p⇔h0s0b4102T	ABCDEfghij12345
I 033	Letter Gothic Bold	Scalable	<esc>(<esc>(s0p⇔h0s3b4102T	ABCDEfghij12345
I 034	*Letter Gothic Italic*	Scalable	<esc>(<esc>(s0p⇔h1s0b4102T	*ABCDEfghij12345*
I 035	Arial	Scalable	<esc>(<esc>(s1p⇕v0s0b16602T	ABCDEfghij12345
I 036	**Arial Bold**	Scalable	<esc>(<esc>(s1p⇕v0s3b16602T	**ABCDEfghij12345**
I 037	*Arial Italic*	Scalable	<esc>(<esc>(s1p⇕v1s0b16602T	*ABCDEfghij12345*
I 038	***Arial Bold Italic***	Scalable	<esc>(<esc>(s1p⇕v1s3b16602T	***ABCDEfghij12345***
I 039	Times New	Scalable	<esc>(<esc>(s1p⇕v0s0b16901T	ABCDEfghij12345

PCL FONT print pattern-2/3 (reduction : XX%)

I 040	**Times New Bold**	Scalable	<esc>(▒<esc>(s1p⇳v0s3b16901T	**ABCDEfghij12345**
I 041	*Times New Italic*	Scalable	<esc>(▒<esc>(s1p⇳v1s0b16901T	*ABCDEfghij12345*
I 042	***Times New Bold Italic***	Scalable	<esc>(▒<esc>(s1p⇳v1s3b16901T	***ABCDEfghij12345***
I 043	ITC Avant Garde Gothic Book	Scalable	<esc>(▒<esc>(s1p⇳v0s0b24607T	ABCDEfghij12345
I 044	**ITC Avant Garde Gothic Demi**	Scalable	<esc>(▒<esc>(s1p⇳v0s2b24607T	**ABCDEfghij12345**
I 045	*ITC Avant Garde Gothic Book Oblique*	Scalable	<esc>(▒<esc>(s1p⇳v1s0b24607T	*ABCDEfghij12345*
I 046	***ITC Avant Garde Gothic Demi Oblique***	Scalable	<esc>(▒<esc>(s1p⇳v1s2b24607T	***ABCDEfghij12345***
I 047	ITC Bookman Light	Scalable	<esc>(▒<esc>(s1p⇳v0s-3b24623T	ABCDEfghij12345
I 048	**ITC Bookman Demi**	Scalable	<esc>(▒<esc>(s1p⇳v0s2b24623T	**ABCDEfghij12345**
I 049	*ITC Bookman Light Italic*	Scalable	<esc>(▒<esc>(s1p⇳v1s-3b24623T	*ABCDEfghij12345*
I 050	***ITC Bookman Demi Italic***	Scalable	<esc>(▒<esc>(s1p⇳v1s2b24623T	***ABCDEfghij12345***
I 051	CourierPS	Scalable	<esc>(▒<esc>(s0p⇔h0s0b24579T	ABCDEfghij12345
I 052	**CourierPS Bold**	Scalable	<esc>(▒<esc>(s0p⇔h0s3b24579T	**ABCDEfghij12345**
I 053	*CourierPS Oblique*	Scalable	<esc>(▒<esc>(s0p⇔h1s0b24579T	*ABCDEfghij12345*
I 054	***CourierPS Bold Oblique***	Scalable	<esc>(▒<esc>(s0p⇔h1s3b24579T	***ABCDEfghij12345***
I 055	Helvetica	Scalable	<esc>(▒<esc>(s1p⇳v0s0b24580T	ABCDEfghij12345
I 056	**Helvetica Bold**	Scalable	<esc>(▒<esc>(s1p⇳v0s3b24580T	**ABCDEfghij12345**
I 057	*Helvetica Oblique*	Scalable	<esc>(▒<esc>(s1p⇳v1s0b24580T	*ABCDEfghij12345*
I 058	***Helvetica Bold Oblique***	Scalable	<esc>(▒<esc>(s1p⇳v1s3b24580T	***ABCDEfghij12345***
I 059	Helvetica Narrow	Scalable	<esc>(▒<esc>(s1p⇳v4s0b24580T	ABCDEfghij12345
I 060	**Helvetica Narrow Bold**	Scalable	<esc>(▒<esc>(s1p⇳v4s3b24580T	**ABCDEfghij12345**
I 061	*Helvetica Narrow Oblique*	Scalable	<esc>(▒<esc>(s1p⇳v5s0b24580T	*ABCDEfghij12345*
I 062	***Helvetica Narrow Bold Oblique***	Scalable	<esc>(▒<esc>(s1p⇳v5s3b24580T	***ABCDEfghij12345***
I 063	New Century Schoolbook Roman	Scalable	<esc>(▒<esc>(s1p⇳v0s0b24703T	ABCDEfghij12345
I 064	**New Century Schoolbook Bold**	Scalable	<esc>(▒<esc>(s1p⇳v0s3b24703T	**ABCDEfghij12345**
I 065	*New Century Schoolbook Italic*	Scalable	<esc>(▒<esc>(s1p⇳v1s0b24703T	*ABCDEfghij12345*
I 066	***New Century Schoolbook Bold Italic***	Scalable	<esc>(▒<esc>(s1p⇳v1s3b24703T	***ABCDEfghij12345***
I 067	Palatino Roman	Scalable	<esc>(▒<esc>(s1p⇳v0s0b24591T	ABCDEfghij12345
I 068	**Palatino Bold**	Scalable	<esc>(▒<esc>(s1p⇳v0s3b24591T	**ABCDEfghij12345**
I 069	*Palatino Italic*	Scalable	<esc>(▒<esc>(s1p⇳v1s0b24591T	*ABCDEfghij12345*
I 070	***Palatino Bold Italic***	Scalable	<esc>(▒<esc>(s1p⇳v1s3b24591T	***ABCDEfghij12345***
I 071	Times Roman	Scalable	<esc>(▒<esc>(s1p⇳v0s0b25093T	ABCDEfghij12345
I 072	**Times Bold**	Scalable	<esc>(▒<esc>(s1p⇳v0s3b25093T	**ABCDEfghij12345**
I 073	*Times Italic*	Scalable	<esc>(▒<esc>(s1p⇳v1s0b25093T	*ABCDEfghij12345*
I 074	***Times Bold Italic***	Scalable	<esc>(▒<esc>(s1p⇳v1s3b25093T	***ABCDEfghij12345***
I 075	*ITC Zapf Chancery Medium Italic*	Scalable	<esc>(▒<esc>(s1p⇳v1s0b45099T	*ABCDEfghij12345*
I 076	Symbol	Scalable	<esc>(19M<esc>(s1p⇳v0s0b16686T	ΑΒΧΔΕφγηιφ12345
I 077	SymbolPS	Scalable	<esc>(19M<esc>(s1p⇳v0s0b45358T	ΑΒΧΔΕφγηιφ12345
I 078	Wingdings	Scalable	<esc>(579L<esc>(s1p⇳v0s0b31402T	✌✍☜☞✗♈♒♓♐♑📂📄📄📄
I 079	ITC Zapf Dingbats	Scalable	<esc>(14L<esc>(s1p⇳v0s0b45101T	✡✢✣✤✥❄✻✼✽✾➪➫➬✓✔✗
I 080	Koufi	Scalable	<esc>(▒<esc>(s0p⇔h0s0b4264T	ABCDEfghij12345
I 081	Koufi Bold	Scalable	<esc>(▒<esc>(s0p⇔h0s3b4264T	ABCDEfghij12345
I 082	Naskh	Scalable	<esc>(▒<esc>(s0p⇔h0s0b4124T	ABCDEfghij12345
I 083	**Naskh Bold**	Scalable	<esc>(▒<esc>(s0p⇔h0s3b4124T	**ABCDEfghij12345**
I 084	Ryadh	Scalable	<esc>(▒<esc>(s1p⇳v0s0b4859T	ABCDEfghij12345
I 085	**Ryadh Bold**	Scalable	<esc>(▒<esc>(s1p⇳v0s3b4859T	**ABCDEfghij12345**
I 086	OKI-OCRB	Scalable	<esc>(2007Z<esc>(s1p⇳v0s0b3110T	ABCDEfghij12345

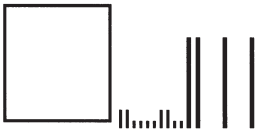
HP LJ4000/8000 Series Compatible Bitmapped Fonts

I 087	Line Printer	16.67/8.5	<esc>(74<esc>(s0p16.67h8.5v0s0b0T	ABCDEfghij12345
I 088	OCR-A	10.00/12.0	<esc>(0O<esc>(s0p10.00h12.0v0s0b104T	ABCDEfghij12345
I 089	OCR-B	10.00/12.0	<esc>(10<esc>(s0p10.00h12.0v0s0b110T	ABCDEfghij12345

PCL FONT print pattern-3/3 (reduction : XX%)

USPS POSTNET Bar Codes

I 090 USPS POSTNET Bar Codes prop/64.8 <esc>(4<esc>(s1p64.8v0s0b65535T



Permanent Soft Fonts

Disk Resident Fonts

③ PPR FONT print pattern (reduction : XX%)

B440

IBM Proprinter IIIXL Emulation Font Print Page

Resident Fonts

CHARACTER PITCH	FONT STYLE	Height Width	Print Sample
10CPI	NORMAL	Hx1 Wx1	ABCDEFGhijklmn0123456789@#%$&*=½
10CPI	EMPHASIZE	Hx1 Wx1	**ABCDEFGhijklmn0123456789@#%$&*=½**
10CPI	ITALIC	Hx1 Wx1	*ABCDEFGhijklmn0123456789@#%$&*=½*
10CPI	NORMAL	Hx2 Wx2	ABCDEFGhijklmn0123
10CPI	EMPHASIZE	Hx2 Wx2	**ABCDEFGhijklmn0123**
10CPI	ITALIC	Hx2 Wx2	*ABCDEFGhijklmn0123*
10CPI	Superscript	Hx1 Wx1	ABCDEFGhijklmn0123456789@#%$&*=½
10CPI	Subscript	Hx1 Wx1	ABCDEFGhijklmn0123456789@#%$&*=½
12CPI	NORMAL	Hx1 Wx1	ABCDEFGhijklmn0123456789@#%$&*=½
12CPI	EMPHASIZE	Hx1 Wx1	**ABCDEFGhijklmn0123456789@#%$&*=½**
12CPI	ITALIC	Hx1 Wx1	*ABCDEFGhijklmn0123456789@#%$&*=½*
12CPI	NORMAL	Hx1 Wx2	ABCDEFGhijklmn0123
12CPI	EMPHASIZE	Hx1 Wx2	**ABCDEFGhijklmn0123**
12CPI	ITALIC	Hx1 Wx2	*ABCDEFGhijklmn0123*
12CPI	Superscript	Hx1 Wx1	ABCDEFGhijklmn0123456789@#%$&*=½
12CPI	Subscript	Hx1 Wx1	ABCDEFGhijklmn0123456789@#%$&*=½
17CPI	NORMAL	Hx1 Wx1	ABCDEFGhijklmn0123456789@#%$&*=½
20CPI	NORMAL	Hx1 Wx1	ABCDEFGhijklmn0123456789@#%$&*=½
PROPORTIONAL	NORMAL	Hx1 Wx1	ABCDEFGhijklmn0123456789@#%$&*=½

Soft Fonts

Disk Fonts

④ FX FONT print pattern (reduction : XX%)

B440

EPSON FX Emulation Font Print Page

Resident Fonts

CHARACTER PITCH	FONT STYLE	Height Width	Print Sample
10CPI	NORMAL	Hx1 Wx1	ABCDEFGhijklmn0123456789@#%$&*=½
10CPI	EMPHASIZE	Hx1 Wx1	**ABCDEFGhijklmn0123456789@#%$&*=½**
10CPI	ITALIC	Hx1 Wx1	*ABCDEFGhijklmn0123456789@#%$&*=½*
10CPI	NORMAL	Hx2 Wx2	ABCDEFGhijklmn0123
10CPI	EMPHASIZE	Hx2 Wx2	**ABCDEFGhijklmn0123**
10CPI	ITALIC	Hx2 Wx2	*ABCDEFGhijklmn0123*
10CPI	Superscript	Hx1 Wx1	ABCDEFGhijklmn0123456789@#%$&*=½
10CPI	Subscript	Hx1 Wx1	ABCDEFGhijklmn0123456789@#%$&*=½
12CPI	NORMAL	Hx1 Wx1	ABCDEFGhijklmn0123456789@#%$&*=½
12CPI	EMPHASIZE	Hx1 Wx1	**ABCDEFGhijklmn0123456789@#%$&*=½**
12CPI	ITALIC	Hx1 Wx1	*ABCDEFGhijklmn0123456789@#%$&*=½*
12CPI	NORMAL	Hx1 Wx2	ABCDEFGhijklmn0123
12CPI	EMPHASIZE	Hx1 Wx2	**ABCDEFGhijklmn0123**
12CPI	ITALIC	Hx1 Wx2	*ABCDEFGhijklmn0123*
12CPI	Superscript	Hx1 Wx1	ABCDEFGhijklmn0123456789@#%$&*=½
12CPI	Subscript	Hx1 Wx1	ABCDEFGhijklmn0123456789@#%$&*=½
17CPI	NORMAL	Hx1 Wx1	ABCDEFGhijklmn0123456789@#%$&*=½
20CPI	NORMAL	Hx1 Wx1	ABCDEFGhijklmn0123456789@#%$&*=½
PROPORTIONAL	NORMAL	Hx1 Wx1	ABCDEFGhijklmn0123456789@#%$&*=½

Soft Fonts

Disk Fonts

⑤ POSTSCRIPT3 EMULATION FONT print pattern (reduction : XX%)

PostScript3 Emulation Typeface List

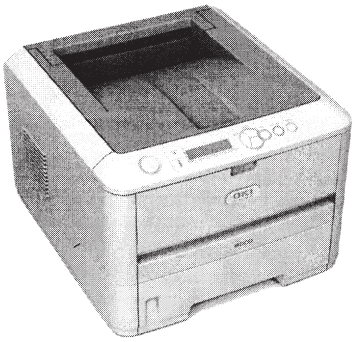
AlbertusMT
AlbertusMT-Italic
AlbertusMT-Light
AntiqueOlive-Bold
AntiqueOlive-Compact
AntiqueOlive-Italic
AntiqueOlive-Roman
Apple-Chancery
Arial-BoldItalicMT
Arial-BoldMT
Arial-ItalicMT
ArialMT
AvantGarde-Book
AvantGarde-BookOblique
AvantGarde-Demi
AvantGarde-DemiOblique
Bodoni
Bodoni-Bold
Bodoni-BoldItalic
Bodoni-Italic
Bodoni-Poster
Bodoni-PosterCompressed
Bookman-Demi
Bookman-DemiItalic
Bookman-Light
Bookman-LightItalic
Candid
Chicago
Clarendon
Clarendon-Bold
Clarendon-Light
CooperBlack
CooperBlack-Italic
COPPERPLATE-THIRTYTHREEBC
COPPERPLATE-THIRTYTWOBC
Coronet-Regular
Courier
Courier-Bold
Courier-BoldOblique
Courier-Oblique
Eurostile
Eurostile-Bold
Eurostile-BoldExtendedTwo
Eurostile-ExtendedTwo
Geneva
GillSans
GillSans-Bold
GillSans-BoldCondensed
GillSans-BoldItalic
GillSans-Condensed
GillSans-ExtraBold
GillSans-Italic
GillSans-Light
GillSans-LightItalic
Goudy
Goudy-Bold
Goudy-BoldItalic
Goudy-ExtraBold
Goudy-Italic
Helvetica
Helvetica-Bold
Helvetica-BoldOblique
Helvetica-Condensed
Helvetica-Condensed-Bold
Helvetica-Condensed-BoldObl
Helvetica-Condensed-Oblique
Helvetica-Narrow
Helvetica-Narrow-Bold
Helvetica-Narrow-BoldOblique
Helvetica-Narrow-Oblique
Helvetica-Oblique
HoeflerText-Black
HoeflerText-BlackItalic
HoeflerText-Italic
HoeflerText-Ornaments
HoeflerText-Regular
JoannaMT
JoannaMT-Bold
JoannaMT-BoldItalic
JoannaMT-Italic
LetterGothic
LetterGothic-Bold
LetterGothic-BoldSlanted
LetterGothic-Slanted
LubalinGraph-Book
LubalinGraph-BookOblique
LubalinGraph-Demi
LubalinGraph-DemiOblique
Marigold
Monaco
MonaLisa-Recut
NewCenturySchlbk-Bold
NewCenturySchlbk-BoldItalic
NewCenturySchlbk-Italic
NewCenturySchlbk-Roman
NewYork
Optima
Optima-Bold
Optima-BoldItalic
Optima-Italic
Oxford
Palatino-Bold
Palatino-BoldItalic
Palatino-Italic
Palatino-Roman
StempelGaramond-Bold
StempelGaramond-BoldItalic
StempelGaramond-Italic
StempelGaramond-Roman
Symbol αβχ
Taffy
Times-Bold
Times-BoldItalic
Times-Italic
TimesNewRomanPS-BoldItalicMT
TimesNewRomanPS-BoldMT
TimesNewRomanPS-ItalicMT
TimesNewRomanPSMT
Times-Roman
Univers
Univers-Bold
Univers-BoldExt
Univers-BoldExtObl
Univers-BoldOblique
Univers-Condensed
Univers-CondensedBold
Univers-CondensedBoldOblique
Univers-CondensedOblique
Univers-Extended
Univers-ExtendedObl
Univers-Light
Univers-LightOblique
Univers-Oblique
Wingdings-Regular
ZapfChancery-MediumItalic
ZapfDingbats

PostScript Emulation is used to identify a PostScript emulation program. PostScript is a registered trademark of Adobe Systems Incorporated.
Times, Helvetica, and Palatino are trademarks of Linotype AG and/or its subsidiaries.
ITC Avant Garde, ITC Zapf Chancery, ITC Zapf Dingbats, and ITC Bookman are registered trademarks of International Typeface Corporation.

⑥ DEMO print pattern (reduction : XX%)

OKI
PRINTING SOLUTIONS

B400 Mono LED Series of Printers



B400 with std.
250 sheet tray

B400 with optional
530 sheet tray

B400 Mono LED Series of Printers

- Up to 30 ppm (letter) 28ppm (A4)*
- Additional Paper Tray Option
- Fast first page out in as little as 5.5 seconds*
- Available in both true 1200 x 1200 and 2400 x 600 dpi resolution
- Network configurations
- Automatic duplex as standard

For more information visit www.okiprintingsolutions.com

OKI is a registered trademark of Oki Electric Industry Co., Ltd.
*Published performance results based on laboratory testing. Individual results may vary.

⑦ Network Information print patter (for B410dn) - 1/2(reduction : XX%)

Network Information

Printer Information

Printer Name	OKI-B410-EB0D8E
Printer Serial Number	
Printer Asset Number	

General Information

Network Model	OkiLAN 8450e		
Firmware Version	t0.06	File Version (WE/WJ/DF/LD/LO)	00.06 / 00.06 / 00.02 / 00.03 / 00.03
Web Remote	00.06	DLM Version (PNL/WEB/NIF/NSP)	00.03 / 00.06 / 00.05 / 00.01
MAC Address	00:80:87:EB:0D:8E		
HUB Link Setting	AUTO NEGOTIATION		
HUB Link Status	LINK FAIL		
Network Status	Unicast Packets Received	Unsendable Packets	
	Packets Transmitted	Bad Packets Received	
	Total Packets Received		

Protocol ON/OFF

TCP/IP	ENABLE	NetWare	ENABLE
NetBEUI	ENABLE	EtherTalk	ENABLE

TCP/IP Configuration

IP Address Set	AUTO
IP Address	192.168.100.100
Subnet Mask	255.255.255.0
Gateway Address	0.0.0.0
WINS Server (Primary)	0.0.0.0
WINS Server (Secondary)	0.0.0.0
WINS Registration Status	Registration of a name is successful.
DNS Server (Primary)	0.0.0.0
DNS Server (Secondary)	0.0.0.0
Dynamic DNS	DISABLE
DDNS Host Name	B410-EB0D8E
DDNS Domain Name	
DDNS Registration Status	

Auto Discovery

Windows	DISABLE		
Macintosh	ENABLE		
Printer Name(Printer is identified by this name.)	OKI-B410-EB0D8E		
WindowsRally			
WSD Print	ENABLE	LLTD	ENABLE
Number of subscriber	0		

NetWare Configuration

NetWare Mode	Queue Server Mode(Print Server + Bindery/NDS + IPX)
Frame Type	AUTO
Network No.	00000000

P-Server Mode

Print Server Name	OKI-B410-EB0D8E-PS
Job Polling Rate	4 Sec
Bindery Mode	ENABLE
NDS Mode	
Tree Name	
Context Name	

R-Printer Mode

Printer Name	OKI-B410-EB0D8E-PR
Job Timeout	10 Sec

EtherTalk Configuration

EtherTalk Printer Name	B410
Type Name	MLPCL7
Zone Name	
Address	
Node	

Network Information print patter (for B410dn) - 2/2(reduction : XX%)

NetBEUI Configuration

Short Printer Name	B410-EB0D8E
Workgroup Name	PrintServer
Comment	EthernetBoard OkiLAN 8450e
Master Browser	

Email Configuration

Email Send Settings

SMTP Send	DISABLE
SMTP Server Name	
Printer Email Address	
Reply-To Address	
SMTP Port Number	25
SMTP-Auth	DISABLE
SMTP Server User ID	

Email Alert Settings

Email Address 1	
Email Address 2	
Email Address 3	
Email Address 4	
Email Address 5	

SNMP Trap Configuration

Printer Trap Community Name	public

Trap Destination	Function	Address
Address1	DISABLE	0.0.0.0
Address2	DISABLE	0.0.0.0
Address3	DISABLE	0.0.0.0
Address4	DISABLE	0.0.0.0
Address5	DISABLE	0.0.0.0
IPX	DISABLE	00000000:000000000000

IPP Configuration

IPP Service	DISABLE	Language	EN-US
Charset	UTF-8	Authentication	NONE

Time/SNTP Configuration

Time Protocol Settings			
SNTP Protocol	DISABLE		
NTP Server (Primary)			
NTP Server (Secondary)			
Adjust Interval	1 hour		
Local Timezone Settings		Daylight Saving Settings	
Local Time Zone	00:00	Daylight Saving	DISABLE

Security

Service ON/OFF

Web	ENABLE	SNMP	ENABLE
Telnet	DISABLE	SNTP	DISABLE
FTP	DISABLE		
IP Filtering	DISABLE		
MAC Address Filtering	DISABLE		

Maintenance

LAN Scale Setting	NORMAL

Network Information print patter (for B430dn) - 1/2(reduction : XX%)

Network Information

Printer Information

Printer Name	OKI-B430-EB0D4E
Printer Serial Number	BETA10530000
Printer Asset Number	

General Information

Network Model	OkiLAN 8450e		
Firmware Version	t0.06	File Version (WE/WJ/DF/LD/LO)	00.06 / 00.06 / 00.02 / 00.03 / 00.03
Web Remote	00.06	DLM Version (PNL/WEB/NIF/NSP)	00.03 / 00.06 / 00.05 / 00.01
MAC Address	00:80:87:EB:0D:4E		
HUB Link Setting	AUTO NEGOTIATION		
HUB Link Status	LINK FAIL		
Network Status	Unicast Packets Received	Unsendable Packets	
	Packets Transmitted	Bad Packets Received	
	Total Packets Received		
IEEE802.1X Status	Disable		
Protocol ON/OFF			
TCP/IP	ENABLE	NetWare	ENABLE
NetBEUI	ENABLE	EtherTalk	ENABLE

TCP/IP Configuration

IP Address Set	AUTO
IP Address	192.168.100.100
Subnet Mask	255.255.255.0
Gateway Address	0.0.0.0
WINS Server (Primary)	0.0.0.0
WINS Server (Secondary)	0.0.0.0
WINS Registration Status	Registration of a name is successful.
DNS Server (Primary)	0.0.0.0
DNS Server (Secondary)	0.0.0.0
Dynamic DNS	DISABLE
DDNS Host Name	B430-EB0D4E
DDNS Domain Name	
DDNS Registration Status	

Auto Discovery			
Windows	DISABLE		
Macintosh	ENABLE		
Printer Name(Printer is identified by this name.)	OKI-B430-EB0D4E		
WindowsRally			
WSD Print	ENABLE	LLTD	ENABLE
Number of subscriber	0		

NetWare Configuration

NetWare Mode	Queue Server Mode(Print Server + Bindery/NDS + IPX)
Frame Type	AUTO
Network No.	00000000
P-Server Mode	
Print Server Name	OKI-B430-EB0D4E-PS
Job Polling Rate	4 Sec
Bindery Mode	ENABLE
NDS Mode	
Tree Name	
Context Name	
R-Printer Mode	
Printer Name	OKI-B430-EB0D4E-PR
Job Timeout	10 Sec

EtherTalk Configuration

EtherTalk Printer Name	B430
Type Name	LaserWriter
Zone Name	
Address	
Node	

Network Information print patter (for B430dn) - 2/2(reduction : XX%)

NetBEUI Configuration

Short Printer Name	B430-EB0D4E
Workgroup Name	PrintServer
Comment	EthernetBoard OkiLAN 8450e
Master Browser	

Email Configuration

Email Send Settings

SMTP Send	DISABLE
SMTP Server Name	
Printer Email Address	
Reply-To Address	
SMTP Port Number	25
SMTP-Auth	DISABLE
SMTP Server User ID	

Email Alert Settings

Email Address 1
Email Address 2
Email Address 3
Email Address 4
Email Address 5

SNMP Trap Configuration

Printer Trap Community Name	public

Trap Destination	Function	Address
Address1	DISABLE	0.0.0.0
Address2	DISABLE	0.0.0.0
Address3	DISABLE	0.0.0.0
Address4	DISABLE	0.0.0.0
Address5	DISABLE	0.0.0.0
IPX	DISABLE	00000000:000000000000

IPP Configuration

IPP Service	DISABLE	Language	EN-US
Charset	UTF-8	Authentication	NONE

Time/SNTP Configuration

Time Protocol Settings			
SNTP Protocol	DISABLE		
NTP Server (Primary)			
NTP Server (Secondary)			
Adjust Interval	1 hour		
Local Timezone Settings		Daylight Saving Settings	
Local Time Zone	00:00	Daylight Saving	DISABLE

IEEE802.1X Configuration

IEEE802.1X	DISABLE
EAP Type	EAP-TLS
EAP User	

Security

Service ON/OFF

Web	ENABLE	SNMP	ENABLE
Telnet	DISABLE	SNTP	DISABLE
FTP	DISABLE		
IP Filtering	DISABLE		
MAC Address Filtering	DISABLE		
Cipher(SSL/TLS)	DISABLE		
Cipher Strength	STANDARD		
Certificate Information			
Certificate Type			
The term of validity			

Maintenance

LAN Scale Setting	NORMAL

Network Information print patter (for B440dn) - 1/2(reduction : XX%)

Network Information

Printer Information

Printer Name	OKI-B440-EB0D4E
Printer Serial Number	BETA10530000
Printer Asset Number	

General Information

Network Model	OkiLAN 8450e		
Firmware Version	t0.06	File Version (WE/WJ/DF/LD/LO)	00.06 / 00.06 / 00.02 / 00.03 / 00.03
Web Remote	00.06	DLM Version (PNL/WEB/NIF/NSP)	00.03 / 00.06 / 00.05 / 00.01
MAC Address	00:80:87:EB:0D:4E		
HUB Link Setting	AUTO NEGOTIATION		
HUB Link Status	LINK FAIL		
Network Status	Unicast Packets Received	Unsendable Packets	
	Packets Transmitted	Bad Packets Received	
	Total Packets Received		
IEEE802.1X Status	Disable		

Protocol ON/OFF

TCP/IP	ENABLE	NetWare	ENABLE
NetBEUI	ENABLE	EtherTalk	ENABLE

TCP/IP Configuration

IP Address Set	AUTO
IP Address	192.168.100.100
Subnet Mask	255.255.255.0
Gateway Address	0.0.0.0
WINS Server (Primary)	0.0.0.0
WINS Server (Secondary)	0.0.0.0
WINS Registration Status	Registration of a name is successful.
DNS Server (Primary)	0.0.0.0
DNS Server (Secondary)	0.0.0.0
Dynamic DNS	DISABLE
DDNS Host Name	B440-EB0D4E
DDNS Domain Name	
DDNS Registration Status	

Auto Discovery

Windows	DISABLE		
Macintosh	ENABLE		
Printer Name(Printer is identified by this name.)	OKI-B440-EB0D4E		
WindowsRally			
WSD Print	ENABLE	LLTD	ENABLE
Number of subscriber	0		

NetWare Configuration

NetWare Mode	Queue Server Mode(Print Server + Bindery/NDS + IPX)
Frame Type	AUTO
Network No.	00000000

P-Server Mode

Print Server Name	OKI-B440-EB0D4E-PS
Job Polling Rate	4 Sec
Bindery Mode	ENABLE
NDS Mode	
Tree Name	
Context Name	

R-Printer Mode

Printer Name	OKI-B440-EB0D4E-PR
Job Timeout	10 Sec

EtherTalk Configuration

EtherTalk Printer Name	B440
Type Name	LaserWriter
Zone Name	
Address	
Node	

Network Information print patter (for B440dn) - 2/2(reduction : XX%)

NetBEUI Configuration

Short Printer Name	B440-EB0D4E
Workgroup Name	PrintServer
Comment	EthernetBoard OkiLAN 8450e
Master Browser	

Email Configuration

Email Send Settings	
SMTP Send	DISABLE
SMTP Server Name	
Printer Email Address	
Reply-To Address	
SMTP Port Number	25
SMTP-Auth	DISABLE
SMTP Server User ID	
Email Alert Settings	
Email Address 1	
Email Address 2	
Email Address 3	
Email Address 4	
Email Address 5	

SNMP Trap Configuration

Printer Trap Community Name: public

Trap Destination	Function	Address
Address1	DISABLE	0.0.0.0
Address2	DISABLE	0.0.0.0
Address3	DISABLE	0.0.0.0
Address4	DISABLE	0.0.0.0
Address5	DISABLE	0.0.0.0
IPX	DISABLE	00000000:000000000000

IPP Configuration

IPP Service	DISABLE	Language	EN-US
Charset	UTF-8	Authentication	NONE

Time/SNTP Configuration

Time Protocol Settings			
SNTP Protocol	DISABLE		
NTP Server (Primary)			
NTP Server (Secondary)			
Adjust Interval	1 hour		
Local Timezone Settings		Daylight Saving Settings	
Local Time Zone	00:00	Daylight Saving	DISABLE

IEEE802.1X Configuration

IEEE802.1X	DISABLE
EAP Type	EAP-TLS
EAP User	

Security

Service ON/OFF			
Web	ENABLE	SNMP	ENABLE
Telnet	DISABLE	SNTP	DISABLE
FTP	DISABLE		
IP Filtering	DISABLE		
MAC Address Filtering	DISABLE		
Cipher(SSL/TLS)	DISABLE		
Cipher Strength	STANDARD		
Certificate Information			
Certificate Type			
The term of validity			

Maintenance

LAN Scale Setting	NORMAL

⑧ Sets Cont Print in the system maintenance mode.

CONTINUOUS PRINT is displayed on the LCD and the same test pattern is printed repetitively.
To stop printing, press the "ON-LINE" or "CANCEL" switch.

- Print pattern (reduction rate: XX%)

```
 !"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_`abcdefghijklmnop
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_`abcdefghijklmnopq
"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_`abcdefghijklmnopqr
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BCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ !"#$%&'()*+,-./0123
CDEFGHIJKLMNOPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ !"#$%&'()*+,-./01234
DEFGHIJKLMNOPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ !"#$%&'()*+,-./012345
EFGHIJKLMNOPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ !"#$%&'()*+,-./0123456
FGHIJKLMNOPQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ !"#$%&'()*+,-./01234567
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RSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ !"#$%&'()*+,-./0123456789:;<=>?@ABC
STUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ !"#$%&'()*+,-./0123456789:;<=>?@ABCD
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WXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ !"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGH
XYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ !"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHI
YZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ !"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJ
Z[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ !"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJK
[\]^_`abcdefghijklmnopqrstuvwxyz{|}~ !"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKL
\]^_`abcdefghijklmnopqrstuvwxyz{|}~ !"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLM
]^_`abcdefghijklmnopqrstuvwxyz{|}~ !"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMN
^_`abcdefghijklmnopqrstuvwxyz{|}~ !"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNO
```

9. PAPER HANDLING

9.1 Physical Description

9.1.1 Paper feeding input

(1) There are 2 sources for the paper feeding; from paper tray and multipurpose tray. (B420/B430/B440)
(2) There are 2 sources for the paper feeding; from paper tray and manual feeding. (B410)

9.1.1.1 Standard tray

(1) Paper tray

(a) Paper tray is a universal size

- Since there is no way for the printer to know what size paper is being set in which tray, paper size must be designated by menu.

(b) Editing Size

1) This equipment sets the size of papers by menu.
2) The printer defaults the size which the PJL command designates as an editing size, which is determined according to commands from the higher system.

- Editing size check
  The relations are shown below of TRAY SELECT, EDIT SIZE, PAPER SIZE and PAPER SIZE CHECK.

Editing size check

PAPER SIZE CHECK / EDIT SIZE / TRAY SELECTION	ENABLE		DISABLE	
	CASSETTE SIZE	OTHER	CASSETTE SIZE	OTHER
TRAY1	Executes a paper size check (checks the convincing paper size from the paper size detecting mechanism and actual paper size), if they are coincident, determines it as an error. The editing size should be such as has been detected.	Executes a paper size check (checks the convincing paper size from the paper size detecting mechanism and actual paper size), if they are coincident, determines it as an error. If the EDIT SIZE by the PJL command differs from that of detection, it will provide a TRAY REQUEST before the start-up of printing. The user should replace these papers with the correct ones.	Executes no paper size check. The editing size should be such as has been detected.	Executes no paper size check. The editing size should be such as has been detected.
TRAY2	Executes a paper size check (checks the convincing paper size from the paper size detecting mechanism and actual paper size), if they are coincident, determines it as an error. The editing size should be such as has been detected.	Executes a paper size check (checks the convincing paper size from the paper size detecting mechanism and actual paper size), if they are coincident, determines it as an error. If the EDIT SIZE by the PJL command differs from that of detection, it will provide a TRAY REQUEST before the start-up of printing. The user should replace these papers with the correct ones.	Executes a paper size check (checks the convincing paper size from the paper size detecting mechanism and actual paper size), if they are coincident, determines it as an error. The editing size should be such as has been detected.	Executes a paper size check (checks the convincing paper size from the paper size detecting mechanism and actual paper size), if they are coincident, determines it as an error. If the EDIT SIZE by the PJL command differs from that of detection, it will provide a TRAY REQUEST before the start-up of printing. The user should replace these papers with the correct ones.
Multipurpose Tray (B420) (B430) (B440)	Paper size check is not performed. A check is actually performed in a free size range (Min.: smallest media - Max.: largest media). The edit size is the detected paper size.	• If the edit size and the paper size in the menu differ, a paper request will be indicated just before print start-up. The user should set the proper size paper.		
MANUAL (B410)	Paper size check is not performed. A check is actually performed in a free size range (Min.: smallest media - Max.: largest media). The edit size is the detected paper size.	Paper size check is not performed. A check is actually performed in a free size range (Min.: smallest media - Max.: largest media). The edit size is the edit size selected in the menu.		

Note) During the TRAY REQUEST, the results from a forced printing by the Front switch pressed are different from those of HP. HP may produce a page with the right side left or cut because of left-justifying printing, but the center-justifying printing of this printer may cut or leave right and left side.

(2) Manual feeding (B410)

(a) Manual feeding is a feeding method, where a single sheet of paper is fed through the special manual feeding slot at a time.

(b) Manual feeding is employed primarily with special media.

- The use of OHP sheet, labels and envelopes are supported only with manual feeding .

(c) Booting method

- A paper of size corresponding to the editing size is requested on LCD panel.
- When the paper is set to the special manual feeding slot, it is drawn in automatically in 0.5 second and printing starts.

(d) Editing size
- Refer to Section 9.1.1.1

(3) 2nd Tray Options

(a) The 2nd tray takes effect only when the 2nd tray is set at power-on.

(b) The paper cassette is an universal cassette that takes any paper size.

(c) Because the printer cannot detect the type of paper set, paper size is to be designated in the menu or PJL.

(4) Multipurpose Tray (B420/ B430/ B440)

(a) A Multi-Purpose Tray will be provided with the base machine.

(b) This tray will accommodate specialty stock materials such as labels , envelopes , transparencies , and unique size plain papers.

(c) Because the printer cannot detect the type of paper set, paper size is to be designated in the menu.

(d) The printer determines the edit size based on the designated size.

9.2 Logical Method

9.2.1 Errors

(1) Jam/jam recovery

(a) Printed paper jam is detected.

(b) When a jam is detected, all those pages which were not printed are printed through recovery printing. There are following 3 internal statuses for a jam.
- Input error
- Feeding jam
- Exit jam

(c) Paper End/Input error
When no paper is fed from the paper tray, this error occurs. After the starting of printing operation, if the paper does not reach the point of Paper sensor, the hopping roller goes through a maximum of 3 tries. If, after these attempts, no paper is fed, this error occurs.

(d) Feeding jam
While the paper is fed from the paper tray, if it gets stuck in the middle somewhere, this error occurs. While the paper did arrive at Paper sensor, but if it does not reach the output within precaluculated time based on the traveling speed of the paper, this error occurs.

(e) Exit jam
- When the paper could not be ejected, this error occurs.
- After closing the cover and warming up following that is completed, when the paper does not arrive at outlet sensor after within precaluculated time based on the length of the paper and the traveling speed, this error occurs.

(2) Recovery

(a) In order to remove a jam, open up the cover (Rear cover) and take out the jammed paper, then close the cover.
(b) After closing the cover, warming up takes place, and when it is completed. Printer performs recovery printing automatically.
(c) With paper end/Input Jam recovery in Printer, the printing can be resumed by pressing the front switch after setting papers,.

(3) Paper length check

(a) After the start of printing operation, physical length of the paper is checked, but if the length is found to be shorter than or longer than the editing size, an error occurs after ejection operation of the paper.

(b) Recovery
- Open the cover, take out the paper and close the cover for warming up.
- Printer performs recovery printing automatically from the paper which is not printed properly.

10. MENU

The default setting of printer (Menu) can be changed by operator panel.

10.1 User Menu

Of DF, *L indicates the default for the brands that have Letter as default. *A indicates the default for the brands that have A4 as default. * indicates default values shared for both.

Table10-1 User Menu (1/33)

Default
*L : The default value for destinations that accept Letter as default.(ODA, OEML)
*A : The default value for destinations that accept A4 as default.(OEL, OEMA, APS, JP1, JPOEM1)
*E : For overseas brands(ODA, OEL, APS)
*J : For Japanese brands(JP1, JPOEM1)
* : Common in both

Vakid
ET : At menu setting
RB : At menu setting and rebooting
JE : At JOB END after exiting a menu
PW : At power cycle
JOB END : It shows that a setting, that was in progress at menu setting, becomes valid after a job ends. It is difficult for an operator to clearly determine the end of a job in the case that a setting changes by menu operation while processing multiple jobs. Thus, it is recommended to change menu settings while a printer is in idle in principle, and a setting specified to JE shall become valid at the same timing as ET.

Save
Menus applicable to saving of settings in "Functions"-"Admin Setup"-"Settings"-"Save Settings"
○ : Save
– : Not save

Category	Item	Value	Default	Function / Notes	Valid	Save
				In each menu of this category, if Execute is selected, printing will be started and it will exit from the menu. * Not printed even if print data is received or local print is executed while a printer is printing. PJL command setting of the printing paper feed origin, and a detailed content: the PN286_7 system specifications (chapter of the outline).doc. Please refer in Chapter 14. [Conditions for display] "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "ALL CATEGORY". "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "INFORMATION MENU".		
INFORMATION MENU	PRINT MENU MAP	EXECUTE		Prints the configuration details of the print server.	ET	—
	NETWORK	EXECUTE		Prints general information on the network (only when a NIC is installed). In PN282/3, the Network Menu print has combined with MenuMap. In PN286/7, Network makes Information besides MenuMap. [Conditions for display] A NIC is installed.	ET	—

Table10-1 User Menu (2/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
INFORMATION MENU	PRINT FILE LIST	EXECUTE		Prints a job file list. Displayed only if FileSystem is installed. [Conditions for display] FileSystem is installed.	ET	—
	PRINT PCL FONT	EXECUTE		Prints a font list of installed PCL emulation. [Conditions for display] "ENABLE" is selected in "MAINTENANCE MENU" - "PERSONALITY" - "PCL." "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "ALL CATEGORY". "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "PCL EMULATION".	ET	—
	PRINT PSE FONT	EXECUTE		Prints a font list of installed PostScript. "ENABLE" is selected in "MAINTENANCE MENU" - "PERSONALITY" - "PS3 EMULATION." This does not appear in Non-PS models.	ET	—
	PRINT PPR FONT	EXECUTE		Prints a font list of IBMPPR. [Conditions for display] For overseas brands. ("ENABLE" is selected in "MAINTENANCE MENU" - "PERSONALITY" - "IBM PPR III XL.") "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "ALL CATEGORY". "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "PPR EMULATION".	ET	—
	PRINT FX FONT	EXECUTE		Prints a font list of EPSON FX. [Conditions for display] For overseas brands. ("ENABLE" is selected in "MAINTENANCE MENU" - "PERSONALITY" - "EPSON FX.") "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "ALL CATEGORY". "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "FX EMULATION".	ET	—
	PRINT ESC/P FONT	EXECUTE		Prints a font list of ESCP [Conditions for display] For domestic brands. ("ENABLE" is selected in "MAINTENANCE MENU" - "PERSONALITY" - "ESC/P") "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "ALL CATEGORY". "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "ESC/P EMULATION".	ET	

Table10-1 User Menu (3/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
INFORMATION MENU	DEMO1	EXECUTE		Prints a demo page. A demo pattern normally installed is one type, and only Demo 1 is displayed. Multiple demo patterns are displayed if provided. 32 demo data can be stored max. For OEM configuration, the items is not displayed unless otherwise a demo pattern has not been stored.	ET	—
	BARCODE PAGE	EXECUTE		Prints a barcode page. ※This function is valid when the PJL command (OKIBARCODESUPPORT) is set to EANBLE.This function becomes invalid and this menu is not displayed when the PJL command is set to DISABLE.	ET	—
	PRINT ERROR LOG	EXECUTE		Prints an error log. Errror log is reseted When execute the CUEEPROM.	ET	—
	USAGE REPORT	EXECUTE		Prints the total of JobLog. When select "Execute", "Copies" is displayed and the number of pages to print can be specified. Support schedule in PN286 though it is unsupport in past black and white machine (PN282/3). [Conditions for display] "EANBLE" is selected in "USER MENU"-"PRINT STATISTICS"-"USAGE REPORT".	ET	—
	ENGINE MENUMAP	EXECUTE		Prints engine information and Prints Supply Exchange Log. In PN282/3, it does by the ENG STAT category of System Maintenance Menu. In PN286/7, it is assumed the specification and the same of color machine (PX735). [Conditions for display] "ENABLE" is selected in "SYSTEM MAINTENANCE MENU"-"TEST PRINT MENU" - "TEST PRINT MENU".	ET	—
				[Conditions for display] "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "ALL CATEGORY". "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "SHUTDOWN MENU". Displayed only if the printer is PN287.		
SHUTDOWN MENU	SHUTDOWN START	EXECUTE		Start the power-off sequence, which runs flash of disk cache or other to protect the file system. This menu operates same as the SHUT DOWN function during the operation. Be sure to shut down by switching off the operation or this menu if necessary. The Shutdown under operation is possible to ShutDown by pressing the BackSW for 4 seconds.	ET	—

Table10-1 User Menu (4/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
SHUTDOWN MENU				[Conditions for display] "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "ALL CATEGORY". "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "MENU LOCKOUT". Displayed only if the printer is PN287.		
PASSWORD	PASSWORD	****	aaaa	Allows a password to be entered for the menu's lockout function. The underline indicates the entry position. A number from 0 to 9 can be entered for each digit. It is possible to move between digits after entering a number. When the correct password is entered, it shifts to the following category "PRINT MENU". When the error password is entered, the following category is skipped to "USAGE MENU". After the password is released, this category item is not displayed. The default value is "aaaa". The password is not initialized with EEPROM RESET.	ET	—
	INCORRECT PASSWORD			This messages is displayed if password cancellation fails.	—	—
				[Conditions for display] "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "ALL CATEGORY". "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "PRINT MENU".		
PRINT MENU	COPIES	1 ~ 999	*	Sets the number of copies. This setting is disabled for Local Print except for Demo Page. Refer to "Int Range"sheet for the displayed mode.	ET JE	○
	DUPLEX	ON OFF	*	Specifies Duplex Print. [Conditions for display] A Duplex Unit is installed.	JE	○
	BINDING	LONG EDGE SHORT EDGE	*	Specifies Binding in Duplex Printing. [Conditions for display] A Duplex Unit is installed. "ON" is selected in "USER MENU" - "PRINT MENU" - "DUPLEX".	JE	○
	MANUAL	ON OFF	*	Specifies Manual Feed. Set ON, feeds paper from Manual Feed irrespective of the PAPER FEED setting. (A designation by the command remains valid.) Copy from PN282 menu specifications. Displayed only if the printer with MANUALFEED. Displayed only if the printer is PN286.	JE	○

Table10-1 User Menu (5/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
PRINT MENU	PAPER FEED	TRAY1 TRAY2 MP TRAY	*	Specifies a paper tray. TRAY2: Displayed only if it is installed. MP TRAY: Displayed only if the printer is PN287.	JE	○
	AUTO TRAY SWITCH	ON OFF	*	Sets the Auto Tray switching function.	JE	○
	TRAY SEQUENCE	DOWN UP PAPER FEED TRAY	*	Specifies selection order priority for switching Auto Tray Select/Auto Tray Switch. UP and DOWN are the same when the printer with MANUALFEED instead of MPTray.	JE	○
	MP TRAY USAGE	WHEN MISMATCH DO NOT USE	*	Sets MP Tray usage. WHEN MISMATCH: if paper mismatch occurs (paper size/ media type in a tray and that of print data don't match), paper is requested to MPTray instead of the specified tray. DO NOT USE: sets MPTray unavailable both in Auto Tray Select and Auto Tray Switch. But, "MP tray" is specified for “PAPER FEED” and "DO NOT USE" is selected, MP tray is subject to Auto Tray Select/Auto Tray Switch. Displayed only if the printer is PN287.	JE	○
	MEDIA CHECK	ENABLE DISABLE	*	Sets whether the printer checks the matching of paper size of the print data and that of the tray. Only standard sizes are subject to be checked.	JE	○
	RESOLUTION	600DPI 1200DPI	*	Sets the resolution. Displayed only if the printer is PN287.	JE	○
	RESOLUTION	600DPI 600x1200DPI 600x2400DPI	*	Sets the resolution. [Conditions for display] Displayed only if the printer is PN286.	JE	○
	TONER SAVE MODE	ENABLE DISABLE	*	Sets theToner Save printing mode ."ON" that has it only in the PJL command is similar to "MEDIUM". The selection have two kinds.It is assumed ENABLE when specifying it with PJL excluding OFF. Setting of print mode that saves amount of toner use. "ON" that has it only in the PJL command is similar to "MEDIUM". When set value of TONERSAVE with the @PJL DEFAULT command and Web, etc.(EEPROM) is rewritten, it is assumed turning off or MEDIUM.	JE	○
	ORIENTATION	PORTRAIT LANDSCAPE	*	Specifies print orientation. It is invalid for PS (it is valid only for PCL/ IBMPPR/ EPSONFX) It is all valid for ESC/P (T.B.D)	JE	○

Table10-1 User Menu (6/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
PRINT MENU	LINES PER PAGE	5LINES ~ 60LINES ~ 64LINES ~ 128LINES	 *L *A	Sets the number of lines that can be printed on a page(Only for PCL)Invalid in PS. Default values listed to the left are for Letter/A4. In practice, however, they change according to the size of paper loaded in the tray. The setting change is not maintained in EEPROM when in the domestic brands. Refer to "Int Range"sheet for the display mode.	JE	○
	EDIT SIZE	CASSETTE SIZE LETTER EXECUTIVE STATEMENT LEGAL14 LEGAL13 A4 A5 A6 B5 CUSTOM COM-9 ENVELOPE COM-10 ENVELOPE MONARCH ENV DL ENVELOPE C5 ENVELOPE C6 ENVELOPE POSTCARD RETURN POSTCARD ENVELOPE1 ENVELOPE2 ENVELOPE3 ENVELOPEFREE	*	Set up the drawing size if the specified size by the specified command from a host is not available. It is valid for (PCL/ IBMPPR/EPSONFX) only, not for PS. For POSTCARD, RETURN POSTCARD, ENVELOPE1, ENVELOPE2, ENVELOPE3, ENVELOPECUSTOM, display it for only domestic brands.	JE	○
				[Conditions for display] "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "ALL CATEGORY". "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "MEDIA MENU".		
MEDIA MENU	TRAY1 PAPERSIZE	A4 A5 B5 LEGAL14 LEGAL13 LETTER EXECUTIVE STATEMENT CUSTOM	*A *L	Set up the paper size for a tray 1. ※The display of LETTER and EXECUTIVE are the same as English even if they are set other languages. STATEMENT is displayed Only the printer is without the large tray.	JE	○
	TRAY1 MEDIATYPE	PLAIN LETTERHEAD BOND RECYCLED CARD STOCK ROUGH	*	Sets the media type for Tray 1.	JE	○

Table10-1 User Menu (7/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
MEDIA MENU	TRAY1MEDIAWEIGHT	LIGHT M LIGHT MEDIUM M HEAVY HEAVY	 *J *E	Sets the paper weight for Tray 1.	JE	○
	TRAY2 PAPERSIZE	A4 A5 B5 LEGAL14 LEGAL13	*A	Set up the paper size for a tray 2. [Conditions for display] Tray2 is installed. ※ The display of LETTER and EXECUTIVE is the same as English even if they are set other languages.	JE	○
		LETTER EXECUTIVE CUSTOM	*L			
	TRAY2 MEDIATYPE	PLAIN LETTERHEAD BOND RECYCLED CARD STOCK ROUGH	*	Sets the media type for Tray 2. [Conditions for display] Tray2 is installed.	JE	○
	TRAY2MEDIAWEIGHT	LIGHT M LIGHT MEDIUM M HEAVY HEAVY	 *J *E	Sets the paper weight for Tray 2. [Conditions for display] Tray2 is installed.	JE	○
	MPT PAPERSIZE	A4 A5 A6 B5 LEGAL14 LEGAL13	*A	Set up the paper size for a MP tray. ※The display of LETTER and EXECUTIVE is the same as English even if they are set other languages. For POSTCARD, RETURN POSTCARD, ENVELOPE1, ENVELOPE2, ENVELOPE3, ENVELOPECUSTOM, display it for only domestic brands. MPTTray is displayed Only the printer is PN287.	JE	○
		LETTER EXECUTIVE STATEMENT CUSTOM	*L			
		COM-9 ENVELOPE COM-10 ENVELOPE MONARCH ENV DL ENVELOPE C5 ENVELOPE C6 ENVELOPE POSTCARD RETURN POSTCARD				
		ENVELOPE1 ENVELOPE2 ENVELOPE3 ENVELOPEFREE				

Table10-1 User Menu (8/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
MEDIA MENU	MPT MEDIATYPE	PLAIN LETTERHEAD TRANSPARENCY LABELS BOND RECYCLED CARD STOCK ROUGH	*	Sets the media type for MP Tray.	JE	○
	MPT MEDIAWEIGHT	LIGHT M LIGHT MEDIUM M HEAVY HEAVY	 *J *E	Sets the paper weight for MP Tray.	JE	○
	MN PAPERSIZE	A4 A5 A6 B5 LEGAL14 LEGAL13 LETTER EXECUTIVE STATEMENT CUSTOM COM-9 ENVELOPE COM-10 ENVELOPE MONARCH ENV DL ENVELOPE C5 ENVELOPE C6 ENVELOPE POSTCARD RETURN POSTCARD ENVELOPE1 ENVELOPE2 ENVELOPE3 ENVELOPEFREE	*A *L	Sets paper size for Manual Tray. Sets paper size becauce the Paper Size Detect mechanism is not provided. For overseas brands , from JPOST to ENVFR are not supported. This setting is invalid for PSE. Manual is displayed Only the printer is PN286.	JE	○
	MN MEDIATYPE	PLAIN LETTERHEAD TRANSPARENCY LABELS BOND RECYCLED CARD STOCK ROUGH	*	Sets paper type for Manual Tray. This setting is invalid for PSE.	JE	○
	MN MEDIAWEIGHT	LIGHT M LIGHT MEDIUM M HEAVY HEAVY	 *J *E	Sets paper weight for Manual Tray. This setting is invalid for PSE.	JE	○
	UNIT OF MEASURE	INCH MILLIMETER	*L *A	Specifies the unit of custom paper size.	JE	○
	X DIMENSION	3.4INCH ~ 8.3INCH ~ 8.5INCH	 *A *L	Specifies paper width of Custom paper as a default value. Sets a paper in a direction perpendicular to paper run direction. Refer to "Int Range"sheet for the display mode.	JE	○
		86MILLIMETER ~ 210MILLIMETER ~ 216MILLIMETER	 *A *L			

Table10-1 User Menu (9/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
MEDIA MENU	Y DIMENSION	5.5INCH ~ 11.0INCH ~ 11.7INCH ~ 14.0INCH	 *L *A	Specifies paper length of Custom paper as a default value. Sets a paper in the same direction to paper run direction. Refer to "Int Range"sheet for the display mode.	JE	○
		140MILLIMETER ~ 279MILLIMETER ~ 297MILLIMETER ~ 356MILLIMETER	 *L *A			
				[Conditions for display] "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "ALL CATEGORY". "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "SYS CONFIG MENU".		
SYS CONFIG MENU	POW SAVE TIME	1 MIN 5 MIN 10 MIN 15 MIN 30 MIN 60 MIN 120 MIN 240 MIN	*	Sets time to wait for moving to Power Save mode. Moves to Power Save mode even during an error.	ET	○
	PERSONALITY	AUTO EMULATION PCL IBM PPR III XL EPSON FX PS3 EMULATION	*	Selects a printer language. IBM PPR III XL/EPSON FX is available only out side of Japan. Only PN287 supports PS3 EMULATION. ESC/ P is displayed in Domestic brands. Selectable printer language which is selected to be "Enable" in "Personality" of SystemMaintenance menu is displayed as options. The contents of the display varies according to a setting of SystemMaintenance menu. PostScript does not appear in Non-PS models. And, this does not appear in Non-PS models if all value is "Disable" in "SystemMaintenance"-"Personaliry"-"IBM PPR III XL" and "EPSON FX".	JE	○
	PARA PS-PROTOCOL	ASCII RAW	*	Specifies PS communication protocol mode of data from Centro. (In RAW mode, Ctrl-T is invalid.) This does not appear in Non-PS models.	PW	○
	USB PS-PROTOCOL	ASCII RAW	*	Specifies PS communication protocol mode of data from USB. (In RAW mode, Ctrl-T is invalid.) This does not appear in Non-PS models.	PW	○

Table10-1 User Menu (10/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
SYS CONFIG MENU	NET PS-PROTOCOL	ASCII RAW	*	Specifies PS communication protocol mode of data from NIC. (In RAW mode, Ctrl-T is invalid.) This does not appear in Non-PS models. [Conditions for display] A NIC is installed.	PW	○
	CLRABLE WARNING	ONLINE JOB	*	Sets display deletion timing of clearable warnings. PS: JOB only	ET	○
	AUTO CONTINUE	ON OFF	* (PN286) * (PN287)	Sets whether a printer is automatically recovered or not when memory overflow/tray request occurs. (Wait time for recovery: 15 sec) It is possible to delete INVALID DATA by pressing the ONLINE switch regardless of its JOB setting. The default value of PN286 is ON. The default value of PN287 is OFF.	ET	○
	MANUAL TIMEOUT	OFF 30 SEC 60 SEC	*	Sets time to wait for paper to be fed in manual feed. If paper is not fed within this period of time, the job is canceled. The set of MANUAL TIMEOUT is effective in the form of set waiting state in MANUAL DUPLEX.	ET	○
	TIMEOUT INJOB	OFF 5 SEC 10 SEC 20 SEC 30 SEC		Sets time between stopping reception of job data and performing force printing. Does not perform printing and cancels that job instead in the case of PS.	ET	○
		40 SEC 50 SEC 60 SEC 90 SEC 120 SEC 150 SEC 180 SEC 210 SEC 240 SEC 270 SEC 300 SEC	*			
	TIMEOUT LOCAL	0 SEC 5 SEC ~ 40 SEC ~ 290 SEC 295 SEC 300 SEC	*	Time of open of each port after end of job(The network is excluded.) Time of the port open indicates the time that open the current port which receiving the current job and so other port be able to receive data. It increase /decreases in the step of 5.	ET	○
	TIMEOUT NET	0 SEC 5 SEC ~ 90 SEC ~ 290 SEC 295 SEC 300 SEC	*	Time of open of Network port after end of job Time of the port open indicates the time that open the current port which receiving the current job and so other port be able to receive data. It increase /decreases in the step of 5. [Conditions for display] A NIC is installed.	ET	○

Table10-1 User Menu (11/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
SYS CONFIG MENU	LOW TONER	CONTINUE STOP	*	Sets printer operation when Toner Low is detected. In CONTINUE, the printer can continue printing while remaining ON-LINE. In STOP, it becomes OFF-LINE.	ET	○
	JAM RECOVERY	ON OFF	*	Sets whether JAM RECOVERY printing is performed or not when Jam occurs. When it is set to OFF, a job that includes the page to which Jam has occurred will be cancelled.	JE	○
	ERROR REPORT	ON OFF	*	Sets whether an error report is printed or not when an internal error occurs. Valid only for PS and PCL XL.	JE	○
	START UP	ON OFF	*	Sets Enable/Disable of the printing function of the Form. This Menu does not appear in Non-PS models.	JE	○
				[Conditions for display] "ENABLE" is selected in "MAINTENANCE MENU" - "PERSONALITY" - "PCL". "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "ALL CATEGORY". "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "PCL EMULATION".		
PCL EMULATION	FONT SOURCE	RESIDENT RESIDENT2 DOWNLOADED	*E *J	Specifies the location of PCL default font. RESIDENT2: Displayed only when Kanji Font is written to Flash ROM. DOWNLOADED: Displayed when soft font is downloaded to RAM as permanent designation. Fonts that have been downloaded to Flash/HDD by the PJL command will not be displayed on this Menu. With the HEISEI font model for Japanese market, Heisei Font is installed in the slot; hence, default is DIMM0. The setting change is not maintained in EEPROM when in the domestic brands.	JE	○

Table10-1 User Menu (12/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
PCL EMULATION	FONT NO.	I0 C1 S1	*	Sets the PCL font number. The valid range of this variable changes depending on the FONT SOURCE setting at the time. If the default font is set for FONT SOURCE, the number starts at 0. If it is not, the number starts at 1. The maximum value is equal to the number of fonts installed in FONT SOURCE. For example, FONT SOURCE has 50 fonts and a default font, Font No. is a value ranged from 0 to 49. When there is no default font, it ranges from 1 to 50. FONT No. is related to FONT SOURCE, and when FONT source changes, FONT NO. is automatically changed to the lowest FONT No. of the new FONT SOURCE. (If the new FONT SOURCE sets default font, it is 0, and if not, it is 1.) "S1" is displayed only when soft font is downloaded with permanent designation. Furthermore, if FONT SOURCE is "S" and a certain soft font is deleted despite that FONT No. is set to the highest number, the value of FONT SOURCE is automatically changed to the factory default, and the value of FONT No. is changed to FONT No. “0” of the new FONT SOURCE. With Heisei Font Model for Japanese market, PCL Font is installed; hence, default is "C1". The setting change is not maintained in EEPROM when in the domestic brands.	JE	○
	FONT PITCH	0.44CPI ~ 10.00CPI ~ 99.99CPI	*	Width of the PCL default font. The unit is character/inch (Default font is fixed-pitch, scalable font.) The value of pitch is displayed down to the second decimal place (in the unit of 0.01 CPI). Displayed only when the font selected in Font No. is fixed-spacing, scalable font. Refer to "Int Range" for the displayed condition. The setting change is not maintained in EEPROM when in the domestic brands.	JE	○
	FONT HEIGHT	4.00POINT ~ 12.00POINT ~ 999.75POINT	*	Height of the PCL default font. The value is displayed down to the second decimal place (in the unit of 0.25 POINT.) Displayed only when the font selected in Font No. is proportional-spacing, scalable font. Refer to "Int Range"sheet for the displayed condition. The setting change is not maintained in EEPROM when in the domestic brands.	JE	○

Table10-1 User Menu (13/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
PCL EMULATION	SYMBOL SET	PC-8 PC-8 Dan/Nor PC-8 Grk PC-8 TK PC-775 PC-850 PC-851 Grk PC-852 PC-855 PC-857 TK PC-858 PC-862 Heb PC-864 L/A PC-866 PC-866 Ukr PC-869 PC-1004 Pi Font Plska Mazvia PS Math PS Text Roman-8 Roman-9 Roman Ext Serbo Croat1 Serbo Croat2 Spanish Ukrainian VN Int'l VN Math VN US Win 3.0 Win 3.1 Arb Win 3.1 L/G Win 3.1 Blt Win 3.1 Cyr Win 3.1 Grk Win 3.1 Heb Win 3.1 L1 Win 3.1 L2 Win 3.1 L5 Wingdings Dingbats MS Symbol OCR-A OCR-B OKI-OCRB HP ZIP USPSFIM USPSSTP USPSZIP Arabic-8 Bulgarian CWI Hung DeskTop German Greek-437 Greek-437 Cy Greek-737 Greek-8	*	Sets a symbol set of PCL. Modifies a symbol set to the default symbol set of the font when the selected font of FONT No. can not use the selected symbol set. Win3.1J is displayed only when Japanese font for PCL is installed. Even it is for Japanese style, when it is uninstalled, PC-8 is default. The setting change is not maintained in EEPROM when in the domestic brands.	JE	○

Table10-1 User Menu (14/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
PCL EMULATION	SYMBOL SET	Greek-928 Hebrew NC Hebrew OC Hebrew-7 Hebrew-8 IBM-437 IBM-850 IBM-860 IBM-863 IBM-865 ISO Dutch ISO L1 ISO L2 ISO L4 ISO L5 ISO L6 ISO L9 ISO Swedish1 ISO Swedish2 ISO Swedish3 ISO-2 IRV ISO-4 UK ISO-6 ASC ISO-10 S/F ISO-11 Swe ISO-14 JASC ISO-15 Ita ISO-16 Por ISO-17 Spa ISO-21 Ger ISO-25 Fre ISO-57 Chi ISO-60 Nor ISO-61 Nor ISO-69 Fre ISO-84 Por ISO-85 Spa ISO-Cyr ISO-Grk ISO-Hebrew Kamenicky Legal Math-8 MC Text MS Publish PC Ext D/N PC Ext US PC Set1 PC Set2 D/N PC Set2 US				

Table10-1 User Menu (15/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
PCL EMULATION	A4 PRINT WIDTH	78 COLUMN 80 COLUMN	*	Sets in PCL the number of characters for A4 paper Auto LF. This is for 10-CPI characters when Auto CR/LF Mode is set to OFF. This menu is enabled only when A4 paper is selected in the menu that sets the print width of A4 paper in portrait orientation. Usually, such A4 paper print width is set to a setting slightly narrower than 8 inches (is about 7.93 inches). This setting cannot print 80 10-cpi characters (can print up to 78 10-cpi characters). 80 characters set at A4 Print Width widens the right and left margins of paper to enable printing 80 10-cpi characters on A4 paper. A PCL command selects or deselects Auto CR/LF mode, or equivalently, selects whether to perform auto CR and LF when the cursor for text exceeds the right margin of paper while the text is continuously input. The setting change is not maintained in EEPROM when in the domestic brands.	JE	○
	WHITE PAGE SKIP	ON OFF	*	Sets whether to eject or not a page without any data to print (blank page) upon reception of FF command (OCH) in PCL Mode. OFF: Ejecting. The setting change is not maintained in EEPROM when in the domestic brands.	JE	○
	CR FUNCTION	CR CR+LF	*	Sets performance when CR code is received in PCL. CR: Carriage Return CR+LF: Carriage Return and Line Feed The setting change is not maintained in EEPROM when in the domestic brands.	JE	○
	LF FUNCTION	LF LF+CR	*	Sets performance when LF code is received in PCL. LF: Line Feed LF+CR: Line Feed and Carriage Return The setting change is not maintained in EEPROM when in the domestic brands.	JE	○
	PRINT MARGIN	NORMAL 1/5 INCH 1/6 INCH	*	Sets a non-printable area of paper. The width of the area along the right and left sides of paper (left and right of paper laid out according to paper orientation) paper outside the printable area NORMAL: PCL emulation compatible, approximately 1/4~1/4.3INCH (depending on paper) is outside the printable area. The setting change is not maintained in EEPROM when in the domestic brands.	JE	○

Table10-1 User Menu (16/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
PCL EMULATION	PEN WIDTH ADJUST	ON OFF	*	When the minimum width is specified in PCL, if you draw a 1-dot line, it sometimes looks broken. With PEN WIDTH Adjust set to ON, when the minimum width is specified, the line width will be emphasized so as to look wider than a 1-dot line. With PEN WIDTH Adjust set to OFF, the line will appear as specified. The setting change is not maintained in EEPROM when in the domestic brands.	JE	○
	TRAY ID#					
	PCL MNID	1 2 ~ 59	*	Sets the # to specify the Manual Feed for the media source command (ESC&l#H) in PCL5e emulation. When # is 7, AutoTraySwitch function is performed. Displayed only if the printer is PN286.	JE	○
	PCL T0ID	1 ~ 4 ~ 59	*	Sets the # to specify the Tray0(MPTray) for the media source command (ESC&l#H) in PCL5e emulation. When # is 7, AutoTraySwitch function is performed.	JE	○
	PCL T1ID	1 ~ 59	*	Sets the # to specify the Tray1 for the media source command (ESC&l#H) in PCL5e emulation. When # is 7, AutoTraySwitch function is performed.	JE	○
	PCL T2ID	1 ~ 5 ~ 59	*	Sets the # to specify the Tray2 for the media source command (ESC&l#H) in PCL5e emulation. Displayed only if the Tray2 is installed. When # is 7, AutoTraySwitch function is performed.	JE	○
				[Conditions for display] For overseas brands. (“MAINTENANCE MENU” - “PERSONALITY” - “IBM PPR III XL” is “ENABLE”.) “ENABLE” is selected in “ADMIN MENU” - “OP MENU” - “ALL CATEGORY”. “ENABLE” is selected in “ADMIN MENU” - “OP MENU” - “PPR EMULATION”.		
PPR EMULATION	CHARACTER PITCH	10 CPI 12 CPI 17 CPI 20 CPI PROPORTIONAL	*	Specifies character pitch in IBM PPR emulation. (Not available with products for Japan.)	JE	○
	FONT CONDENSE	12CPI TO 20CPI 12CPI TO 12CPI	*	Specifies 12CPI pitch for Condense Mode. (Not available with products for Japan.)	JE	○

Table10-1 User Menu (17/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
PPR EMULATION	CHARACTER SET	SET-2 SET-1	*	Sets a character set. (Not available with products for Japan.)	JE	○
	SYMBOL SET	IBM-437 IBM-850 IBM-860 IBM-863 IBM-865 PC Set1 PC Ext US PC Ext D/N PC Set2 US PC Set2 D/N Roman-8 ISO L1 PC-8 PC-8 Dan/Nor PC-850 Legal ISO-2 IRV ISO-4 UK ISO-6 ASC ISO-10 S/F ISO-11 Swe ISO-14 JASC ISO-15 Ita ISO-16 Por ISO-17 Spa ISO-21 Ger ISO-25 Fre ISO-57 Chi ISO-60 Nor ISO-61 Nor ISO-69 Fre ISO-84 Por ISO-85 Spa German Spanish ISO Dutch Roman Ext ISO Swedish1 ISO Swedish2 ISO Swedish3	*	Sets a symbol set. (Not available with products for Japan.)	JE	○
		VN Math VN Int'l VN US PS Math PS Text Math-8 Pi Font MS Publish Win 3.0 DeskTop				
		Win 3.1 L1 MC Text PC-852 Win 3.1 L5 Win 3.1 L2 CWI Hung PC-857 TK ISO L2 ISO L5 PC-8 TK				

Table10-1 User Menu (18/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
PPR EMULATION	SYMBOL SET	Kamenicky Hebrew NC Hebrew OC Plska Mazvia ISO L6 Win 3.1 Heb Win 3.1 Cyr PC-866 Win 3.1 Grk PC-869 PC-855 Greek-437 Greek-437 Cy Greek-737 Greek-928 Serbo Croat2 Ukrainian Bulgarian PC-1004 Win 3.1 Blt PC-775 Serbo Croat1 PC-858 Roman-9 ISO L9 Greek-8 Win 3.1 L/G PC-851 Grk PC-8 Grk Hebrew-7 ISO-Hebrew Hebrew-8 PC-862 Heb ISO-Cyr ISO-Grk PC-866 Ukr ISO L4				
	LETTER 0 STYLE	ENABLE DISABLE	*	Specifies the style that replaces ϕ (9B) and ¥ (9D) with ϕ (ou) and Φ (zero) (Not available with products for Japan.)	JE	○
	ZERO CHARACTER	NORMAL SLASHED	*	Specifies the style of 0(zero). SLASHED: SLASH ZERO (Not available with products for Japan.)	JE	○
	LINE PITCH	6 LPI 8 LPI	*	Sets line space. (Not available with products for Japan.)	JE	○
	WHITE PAGE SKIP	ON OFF	*	Sets ejecting or not ejecting a blank sheet. Available only when simplex is set. (Not available with products for Japan.)	JE	○
	CR FUNCTION	CR CR+LF	*	Sets performance when CR code is received. (Not available with products for Japan.)	JE	○
	LF FUNCTION	LF LF+CR	*	Sets performance when LF code is received. (Not available with products for Japan.)	JE	○

Table10-1 User Menu (19/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
PPR EMULATION	LINE LENGTH	80 COLUMN 136 COLUMN	*	Specifies the number of characters per line. (Not available with products for Japan.)	JE	○
	FORM LENGTH	11 INCH 11.7 INCH 12 INCH	*L *A	Specifies the length of paper. (Not available with products for Japan.)	JE	○
	TOF POSITION	0.0INCH 0.1INCH ~ 1.0INCH	*	Sets the position from the top edge of paper. Refer to “Int Range”sheet for the displayed condition. (Not available with products for Japan.)	JE	○
	LEFT MARGIN	0.0INCH 0.1INCH ~ 1.0INCH	*	Sets the amount to shift the horizontal print start position to the right. Refer to “Int Range”sheet for the displayed condition.(Not available with products for Japan.)	JE	○
	FIT TO LETTER	ENABLE DISABLE	*L *A	Sets the printing mode that can fit print data, equivalent to 11 inches (66 lines), in the LETTER-size printable area. (Not available with products for Japan.) (ODA: “Enable” = default)	JE	○
	TEXT HEIGHT	SAME DIFF	*	Sets height of a character. SAME: Regardless of CPI, same height DIFF: According to CPI, character heights vary.[Existing model compatible] (Not available with models for Japan)	JE	○
				[Conditions for display] For overseas brands. (“MAINTENANCE MENU” - “PERSONALITY” - “EPSON FX” is “ENABLE”.) “ENABLE” is selected in “ADMIN MENU” - “OP MENU” - “ALL CATEGORY”. “ENABLE” is selected in “ADMIN MENU” - “OP MENU” - “FX EMULATION”.		
FX EMULATION	CHARACTER PITCH	10 CPI 12 CPI 17 CPI 20 CPI PROPORTIONAL	*	Specifies character pitch. (Not available with products for Japan.)	JE	○
	CHARACTER SET	SET-2 SET-1	*	Specifies a character set. (Not available with products for Japan.)	JE	○
	SYMBOL SET	IBM-437 IBM-850 IBM-860 IBM-863 IBM-865 PC Set1 PC Ext US PC Ext D/N PC Set2 US PC Set2 D/N	*	Specifies a symbol set. (Not available with products for Japan.)	JE	○

Table10-1 User Menu (20/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
FX EMULATION	SYMBOL SET	Roman-8 ISO L1 PC-8 PC-8 Dan/Nor PC-850 Legal ISO-2 IRV ISO-4 UK ISO-6 ASC ISO-10 S/F ISO-11 Swe ISO-14 JASC ISO-15 Ita ISO-16 Por ISO-17 Spa ISO-21 Ger ISO-25 Fre ISO-57 Chi ISO-60 Nor ISO-61 Nor ISO-69 Fre ISO-84 Por ISO-85 Spa German Spanish ISO Dutch Roman Ext ISO Swedish1 ISO Swedish2 ISO Swedish3 VN Math VN Int'l VN US PS Math PS Text Math-8 Pi Font MS Publish Win 3.0 DeskTop Win 3.1 L1 MC Text PC-852 Win 3.1 L5 Win 3.1 L2 CWI Hung PC-857 TK ISO L2 ISO L5 PC-8 TK Kamenicky Hebrew NC Hebrew OC Plska Mazvia ISO L6 Win 3.1 Heb Win 3.1 Cyr PC-866 Win 3.1 Grk PC-869				

Table10-1 User Menu (21/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
FX EMULATION	SYMBOL SET	PC-855 Greek-437 Greek-437 Cy Greek-737 Greek-928 Serbo Croat2 Ukrainian Bulgarian PC-1004 Win 3.1 Blt PC-775 Serbo Croat1 PC-858 Roman-9 ISO L9 Greek-8 Win 3.1 L/G PC-851 Grk PC-8 Grk Hebrew-7 ISO-Hebrew Hebrew-8 PC-862 Heb ISO-Cyr ISO-Grk PC-866 Ukr ISO L4				
	LETTER 0 STYLE	ENABLE DISABLE	*	Specifies the style that replaces ϕ (9B) and ¥ (9D) with ϕ (ou) and Φ (zero). (Not available with products for Japan.)	JE	○
	ZERO CHARACTER	NORMAL SLASHED	*	Specifies the style of O (zero). SLASHED: SLASH ZERO (Not available with products for Japan.)	JE	○
	LINE PITCH	6 LPI 8 LPI	*	Sets line spacing (Not available with products for Japan.)	JE	○
	WHITE PAGE SKIP	ON OFF	*	Sets whether ejecting a blank sheet or not. Available only when simplex is set. (Not available with products for Japan.)	JE	○
	CR FUNCTION	CR CR+LF	*	Sets performance when CR code is received. (Not available with products for Japan.)	JE	○
	LINE LENGTH	80 COLUMN 136 COLUMN	*	Specifies the number of characters per line. (Not available with products for Japan.)	JE	○
	FORM LENGTH	11 INCH 11.7 INCH 12 INCH	*L *A	Specifies the length of paper. (Not available with products for Japan.)	JE	○
	TOF POSITION	0.0INCH 0.1INCH ~ 1.0INCH	*	Sets the position from the top edge of paper. Refer to “Int Range”sheet for the displayed condition.(Not available with products for Japan.)	JE	○

Table10-1 User Menu (22/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
FX EMULATION	LEFT MARGIN	0.0INCH 0.1INCH ~ 1.0INCH	*	Sets the amount of shifting the horizontal print start position to the right. Refer to “Int Range”sheet for the displayed condition. (Not available with products for Japan.)	JE	○
	FIT TO LETTER	ENABLE DISABLE	*L *A	Sets the printing mode that can fit print data, equivalent to 11 inches (66 lines), in the Letter-size printable area. (Not available with products for Japan.) (ODA: “Enable”= default)	JE	○
	TEXT HEIGHT	SAME DIFF	*	Sets height of a character. SAME: Regardless of CPI, same height DIFF: According to CPI, character heights vary.[Existing model compatible] (Not available with models for Japan)	JE	○
				[Conditions for display] For domestic brands. (“MAINTENANCE MENU” - “PERSONALITY” - “ESC/P” is “ENABLE”.) “ENABLE” is selected in “ADMIN MENU” - “OP MENU” - “ALL CATEGORY”. “ENABLE” is selected in “ADMIN MENU” - “OP MENU” - “ESC/P EMULATION”.		
ESC/P EMULATION	KANJI FONT	AUTO MINCHO GOTHIC	*	Sets KANJI font. 2 types of font, MINCHO and GOTHIC, can be selected. If AUTO is selected, MINCHO is specified when turning power on and completing each initialization. After that, it complies with a setting of KANJI font command received from the host machine. If each font fixing is selected, a KANJI font command is ignored and the selected font is always printed.	JE	○
	ANK FONT	AUTO ROMAN SERIF	*	Sets ANK font. 2 types of font, ROMAN and SERIF, can be selected. If AUTO is selected, ROMAN is specified when turning power on and completing each initialization. After that, it complies with a setting of ANK font command received from the host machine. If each font fixing is selected, an ANK font command is ignored and the selected font is always printed.	JE	○
	SYMBOL SET	KANA GRAPHIC	*	Sets ANK character code table. When receiving the ANK character code table setup command, a setting of the command has a priority.	JE	○
	ZERO CHARACTER	NORMAL SLASHED	*	Specifies the style of 0 (zero) of ANK, no-slashed or slashed.	JE	○

Table10-1 User Menu (23/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
ESC/P EMULATION	REDUCTION PRINT	NORMAL A4x2->A4 B4->A4 15INCH->A4 10INCH->A4	*	Sets the reduction print size. If a same size is selected, reduction print is cancelled. If selecting 15 inch → A4, the print orientation is landscape, and if selecting 10 inch → A4, the print orientation is portrait, and it does not influence to a setting configured in the print orientation of the Print menu in Page Layout 2. If any size except A4 is set by a combination of the tray selection and paper size selection, all options of this item can be selected, however, printing is performed by the same size.	JE	○
	PRINT POSITION	5 MILLIMETER 8.5 MILLIMETER 22 MILLIMETER	*	Sets a vertical print position of the first character in a page by means of a distance from the paper top edge to the character top edge.	JE	○
	H OFFSET	- 1.0MILLIMETER ~ 0.0MILLIMETER ~ +20.0MILLIMETER	*	Corrects the print position horizontally for the editing direction in increments of 0.5mm. Left = Minus Right = Plus For the displaying style, refer to "Int Range sheet".	JE	○
	V OFFSET	-15.0MILLIMETER ~ 0.0MILLIMETER ~ +15.0MILLIMETER	*	Corrects the print position vertically for the editing direction in increments of 0.5mm. Up = Minus Down = Plus If the total setting value of "Print Position" in the "ESC/P Emulation" menu and this item is 4.0mm or less, the internal total shift amount becomes 4.00mm for operating. Print start position 8.5mm → Effective value Until -4.50mm Print start position 22mm → Effective value Until -15.00mm Print start position 5mm → Effective value Until -1.00mm For the displaying style, refer to "Int Range sheet".	JE	○
	RIGHT MARGIN	WIDTH 136 COL	*	Sets the right margin position that specifies a limit of one line. If WIDTH is selected, the printable area of paper to use is set. If 136COL is selected, 136 columns (13.6 inch) are printed regardless of the paper size, and print data that exceeds the printable area is cut. When receiving the right margin setup command, a setting of the command has a priority.	JE	○
	CR FUNCTION	CR CR+LF	*	Sets an operation when receiving the CR code.	JE	○
	AUTO LF	CR+LF DISABLE	*	Sets an operation at right margin over.	JE	○

Table10-1 User Menu (24/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
ESC/P EMULATION	SELECTIN	ENABLE DISABLE	*	Displayed in the domestic brands. It is used by ESC/P. Configure the effective selection range of SELECT IN signal for DC1 and DC3 commands. When ENABLE is selected, if the SELECT IN signal is high level when power on, the DC1/ DC3 commands are always be neglected when the command is effective and the selection is ineffective.(The SELECT IN signal is fixed the LOW level). It is effective to the ESC/P emulation even if “SYS CONF MENU” and “EMULATE” settings are “AUTO”.	ET	—
	AUTOFEED	ENABLE DISABLE	*	Displayed in the domestic brands. It is used by ESC/P. Set the signal of AUTO FEED XT.When ENABLE is selected,if the AUTO FEED XT signal is low level when power on, the changing line operation to the CR code is done. When DISABLE is selected,the changing line operation to the CR code is not done. (The AUTO FEED XT signal is fixed the HIGHT level). It is effective to the ESC/P emulation even if “SYS CONF MENU” and “EMULATE” settings are “AUTO”.	ET	—
	IMAGE	REGULAR PHOTO	*	Displayed in the domestic brands. It is used by ESC/P. Set the conversion method when it is converted from 180DPI to 300DPI.	ET	—
				[Conditions for display] “ENABLE” is selected in “ADMIN MENU” - “OP MENU” - “ALL CATEGORY”. “ENABLE” is selected in “ADMIN MENU” - “OP MENU” - “PARALLEL MENU”.		
PARALLEL MENU	PARALLEL	ENABLE DISABLE	*	Sets Enable/Disable of Centro I/F. It is not possible to set up “DISABLE” if “USER MENU” - “USB MENU” - “USB” is “DISABLE”. However, it is possible to set all the localport “DISABLE” when PJL command “LOCALPORTALLDISABLE” is setted ENABLE.	PW	—
	BI-DIRECTION	ENABLE DISABLE	*	Sets Enable/Disable of bi-directional Centro.	PW	—
	ECP	ENABLE DISABLE	*	Sets Enable/Disable of ECP mode.	PW	—
	ACK WIDTH	NARROW MEDIUM WIDE	*	Sets ACK width for compatible reception. NARROW = 0.5µs MEDIUM = 1.0µs WIDE = 3.0µs	PW	—

Table10-1 User Menu (25/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
PARALLEL MENU	ACK/BUSY TIMING	ACK IN BUSY ACK WHILE BUSY	*	Sets the order to output the BUSY signal and the ACK signal for compatible reception. ACK IN BUSY: BUSY=LOW-> The end of ACK pulse ACK WHILE BUSY: BUSY=LOW -> The center of ACK pulse	PW	—
	I-PRIME	3 MICRO SEC 50 MICRO SEC DISABLE	*(PN286) *(PN287)	Sets time to enable/disable the I-PRIME signal. 3 MICRO SEC: Enabled with the 3µs nInit signal. 50 MICRO SEC: Enabled with the 50µs nInit signal. When I-Prime is received when enabled, only Centro driver is initialized. The default value of PN286 is 3 MICRO SEC. The default value of PN287 is DISABLE.	PW	—
	OFFLINE RECEIVE	ENABLE DISABLE	*	Sets Enable/Disable of a function that keeps receive-possible state without changing an I/F signal even though an alarm occurs. When this is set to Enable, I/F keeps receive-possible state even while the printer is moving to Off-line because you press operating panel switch. I/F sends the BUSY signal only when the reception buffer is full or service call occurs. This menu is not displayed on a Non-PS machine. (It is fixed to Disable on a Non-PS machine.)	PW	—
				[Conditions for display] “ENABLE” is selected in “ADMIN MENU” - “OP MENU” - “ALL CATEGORY”. “ENABLE” is selected in “ADMIN MENU” - “OP MENU” - “USB MENU”.		
USB MENU	USB	ENABLE DISABLE	*	Sets USB I/F Enable/Disable. When printer start ,other I/F except Network are all set to DISABLE, this item cannnot be set to DISABLE. However,It is possible to set all the localport “DISABLE” when PJL command “LOCALPORTALLDISABLE” is setted ENABLE.	PW	—
	SOFT RESET	ENABLE DISABLE	*(PN286) *(PN287)	Sets Enable/Disable of Soft Reset command. The default value of PN286 is ENABLE. The default value of PN287 is DISABLE.	PW	○
	SPEED	480Mbps 12Mbps	*	Sets of the max. USB I/F transfer speed.	PW	○

Table10-1 User Menu (26/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
USB MENU	OFFLINE RECEIVE	ENABLE DISABLE	*	Sets Enable/Disable of a function that keeps receive-possible state without changing I/F signal even though an alarm occurs. When this is set to Enable, I/F keeps receive-possible state even while the printer is moving to Off-line because you press operating panel switch. I/F sends the BUSY signal only when the reception buffer is full or service call occurs. This menu is not displayed on a Non-PS machine. (It is fixed to Disable on a Non-PS machine.)	PW	○
	SERIAL NUMBER	ENABLE DISABLE	*	Specifies Enable/Disable of a USB serial number. A USB serial number is used to identify a USB device to which a PC is connected.	PW	○
				[Conditions for display] A NIC is installed. “OP MENU” - “ALL CATEGORY” is “ENABLE”. “OP MENU” - “NETWORK MENU” is “ENABLE”.		
NETWORK MENU	TCP/IP	ENABLE DISABLE	*	Sets Enable/Disable of TCP/IP Protocol. ENABLE: TCP/IP Protocol is available. DISABLE: TCP/IP Protocol is not available.	JE	—
	IP VERSION	IP v4 IP v4+v6 IP v6	*	Set up the IP version. Operates with IPv4 for IPv4 (Invalid with IPv6). Operates with both IPv4 and IPv6 for IP v4+v6. Operates with IPv6 for IPv6. (Invalid with IPv4). There is only IPv4 and IPv4 + v6 as normal value. From this stage, If IPv6 only is set	JE	—
	NETBEUI	ENABLE DISABLE	*	Sets Enable/Disable of NetBEUI Protocol. ENABLE: NetBEUI Protocol is available. DISABLE: NetBEUI Protocol is not available.	JE	—
	NETWARE	ENABLE DISABLE	*	Sets Enable/Disable of NetWare Protocol. ENABLE: NetWare Protocol is available. DISABLE: NetWare Protocol is not available.	JE	—
	ETHERTALK	ENABLE DISABLE	*	Sets Enable/Disable of EtherTalk Protocol. ENABLE: EtherTalk Protocol is available. DISABLE: EtherTalk Protocol is not available.	JE	—
	FRAME TYPE	AUTO 802.2 802.3 ETHERNET II SNAP	*	Sets the frame type. [Conditions for display] “ENABLE” is selected in “NetWare.”	JE	—

Table10-1 User Menu (27/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
NETWORK MENU	IP ADDRESS SET	AUTO MANUAL	*	Sets the IP address setting method. [Conditions for display] • “TCP/IP”should be ENABLE and “IP v4” or “IPv4+v6 for “IP VERSION”.	JE	—
	IP ADDRESS	xxx.xxx.xxx.xxx		Sets the IP address. [Conditions for display] • “TCP/IP”should be ENABLE and “IP v4” or “IPv4+v6 for “IP VERSION”.	JE	—
	SUBNET MASK	xxx.xxx.xxx.xxx		Sets the subnet mask. [Conditions for display] • “TCP/IP”should be ENABLE and “IP v4” or “IPv4+v6 for “IP VERSION”.	JE	—
	GATEWAY ADDRESS	xxx.xxx.xxx.xxx		Sets t0	JE	—
	WEB	ENABLE DISABLE	*	Sets Enable/Disable of Web. ENABLE: Web is available. DISABLE: Web is not available. [Conditions for display] “ENABLE” is selected in “TCP/IP.”	JE	—
	TELNET	ENABLE DISABLE	*	Sets Enable/Disable of Telnet. ENABLE: Telnet is available. DISABLE: Telnet is not available. [Conditions for display] “ENABLE” is selected in “TCP/IP.”	JE	—
	FTP	ENABLE DISABLE	*	Sets Enable/Disable of FTP. ENABLE: FTP is available. DISABLE: FTP is not available. [Conditions for display] “ENABLE” is selected in “TCP/IP.”	JE	—
	SNMP	ENABLE DISABLE	*	Sets SNMP of FTP. ENABLE: SNMP is available. DISABLE: SNMP is not available. [Conditions for display] “ENABLE” is selected in “TCP/IP” or “NETWARE”.	JE	—
	NETWORK SCALE	NORMAL SMALL	*	When NORMAL is selected, it can work effectively even when it is connected to HUB that has a spanning tree feature. However, printer start up time gets longer when computers are connected with two or three small LANs. When SMALL is selected, computers can cover from two or three small LANs to a large LAN, but it may not work effectively when it is connected to HUB with a spanning tree feature.	JE	—
	HUB LINK SETTING	AUTO NEGOTIATE 100BASE-TX FULL 100BASE-TX HALF 10BASE-T FULL 10BASE-T HALF	*	Sets a method to link with HUB. When Auto is set, a connection method to HUB is selected automatically and attempts to connect. If another method is selected, attempts to connect to HUB only by the selected connection method.	JE	—
	FACTORY DEFAULTS	EXECUTE	-	Specifies whether to initialize the network menu or not.	JE	—

Table10-1 User Menu (28/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
				[Conditions for display] “ENABLE” is selected in “ADMIN MENU” - “OP MENU” - “ALL CATEGORY”. “ENABLE” is selected in “ADMIN MENU” - “OP MENU” - “MEMORY MENU”.		
MEMORY MENU (Note) Default is not displayed. To display it, setting to "ENABLE" for "MEMORY MENU" in "OP MENU" of "ADMIN MENU" is required.	RECEIVE BUF SIZE	AUTO 0.1MB 0.2MB 0.5MB 1MB 2MB	*	Sets the size of receive buffer AUTO: Calculated by the following formula. The size should be designated by the value smaller than the calculation result. The minimum: 0.1MB Formula = ((TM-BM)*0.03+0.5)*const BM: Base memory size, Min. component resident memory size of the series model.(PN286/7=32MB) TM: Total memory size, Total RAM memory.Const=0.25 The maximum selection that Menu displays is equal to the following formula or smaller. Formula=TM*0.08*const ※The display of RECEIVE BUF SIZE is the same as English even if it set other languages.	PW	○
	RESOURCE SAVE	AUTO OFF 0.1MB 0.2MB 0.5MB 1MB 2MB	*	Sets the size of resource saving area. AUTO: Calculated by the following formula. This size should be designated by the value smaller than the calculation result. The minimum: 0.1MB Formula = ((TM-BM)*0.03+0.5)*const BM: Base memory size, Min. component resident memory size of the series model.(PN286/7=32MB) TM: Total memory size, Total RAM memory.Const=0.25 The maximum selection that Menu displays is equal to the following formula or smaller. Formula=TM*0.08*const This Menu is displayed only if PS is installed. This does not appear in Non-PS models.	PW	○
	FREE MEMORY	#####KB		Response value is approximate memory size which is available in editing received data. This menu is not displayed in LCD. Respnse for PJL command.		—
				[Conditions for display] “ENABLE” is selected in “ADMIN MENU” - “OP MENU” - “ALL CATEGORY”. “ENABLE” is selected in “ADMIN MENU” - “OP MENU” - “SYS ADJUST MENU”.		

Table10-1 User Menu (29/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
SYS ADJUST MENU (Note) Default is not displayed. To display it, setting to "ENABLE" for "SYS ADJUST MENU" in "OP MENU" of "ADMIN MENU" is required.	X ADJUST	0.00MILLIMETER +0.25MILLIMETER ~ +2.00MILLIMETER -2.00MILLIMETER ~ -0.25MILLIMETER	*	Adjusts the position of a whole print image in the direction that is perpendicular to the direction paper runs, that is horizontally (at 0.25 mm pitch). Any parts of the print image that go beyond the printable area as a result of this designation are clipped. This function is effective only when “PrinterMode” is “Vector” in the Printer driver.	JE	○
	Y ADJUST	0.00MILLIMETER +0.25MILLIMETER ~ +2.00MILLIMETER -2.00MILLIMETER ~ -0.25MILLIMETER	*	Adjust the position of a whole print image in the direction paper runs, that is vertically (at 0.25mm pitch). Any parts of the print image that go beyond the printable area as a result of this designation are clipped. Correction in negative values is invalid in PS Mode. This function is effective only when “PrinterMode” is “Vector” in the Printer driver.	JE	○
	DUPLEX X ADJUST	0.00MILLIMETER +0.25MILLIMETER ~ +2.00MILLIMETER -2.00MILLIMETER ~ -0.25MILLIMETER	*	At the time of back page printing of Duplex, adjusts the position of the whole print image in the direction that is perpendicular to the direction paper runs, that is horizontally (at 0.25mm pitch). Any parts of the print image that go beyond the printable area as a result of this designation are clipped. This function is effective only when “PrinterMode” is “Vector” in the Printer driver. Refer to “Int Range” sheet for the displayed condition. [Conditions for display] Duplex unit is installed.	JE	○
	DUPLEX Y ADJUST	0.00MILLIMETER +0.25MILLIMETER ~ +2.00MILLIMETER -2.00MILLIMETER ~ -0.25MILLIMETER	*	At the time of back page printing of Duplex, adjusts the position of a whole print image in the direction paper runs, that is vertically (at 0.25mm pitch). Any parts of the print image that go beyond the printable area as a result of this designation are clipped. Adjustment in negative values is invalid in PS Mode. This function is effective only when “PrinterMode” is “Vector” in the Printer driver. Refer to “Int Range” sheet for the displayed condition. [Conditions for display] Duplex unit is installed.	JE	○

Table10-1 User Menu (30/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
SYS ADJUST MENU (Note) Default is not displayed. To display it, setting to "ENABLE" for "SYS ADJUST MENU" in "OP MENU" of "ADMIN MENU" is required.	PLACE PAGE	CENTER LEFT	*	Sets the mechanical paper position to Center-based or Left-based. This is the reference base used in printing paper narrower than Edit Size.From Manual Feeder without specifying Paper Size. (Left-based is HP compatible). This function is only for horizontal direction to the last, and the vertical direction is not shifted. The starting point at LANDSCAPE is not a starting point of the form set by the menu but a position under the left in which side shifts as for the print image.	JE	○
	HEX DUMP	EXECUTE	-	Prints out data received from the host PC in the hexadecimal Dump. Turning off the power supply switch restores Normal Mode from HEX Dump Mode. After it shifts to shift HexDupm mode, it is impossible to communicate with the status monitor .	JE	—
				[Conditions for display] “ENABLE” is selected in “ADMIN MENU” - “OP MENU” - “ALL CATEGORY”. “ENABLE” is selected in “ADMIN MENU” - “OP MENU” - “MAINTENANCE MENU”.		
MAINTENANCE MENU	MENU RESET	EXECUTE	-	Resets EEPROM of CU. Resets User menu to the factory default. If Execute is selected, It exits from the menu after the COMPLETE character is displayed. However, when this function is executed with PJL, WINDOW named COMPLETE is not displayed.	ET	—
	SAVE MENU (B430/B440)	EXECUTE	-	Saves menus currently set. With this function, the menus with which operation was last performed are saved, and overwrites with them menus that were previously saved. When the Enter switch is pressed, the following confirmation message appears. ARE YOU SURE? YES/NO When NO is selected, next preceding menus are restored. When YES is selected, the current menu settings are saved and this menu is exited.	ET	—
	RESTORE MENU (B430/B440)	EXECUTE	-	Changes to the menu setting saved. When the Enter switch is pressed, the following confirmation message appears. ARE YOU SURE? YES/NO If NO is selected, the previous menu display resumes. If YES is selected, changes to the menu setting saved and exit from the menu. *It will not be executed when there is the printing data.	ET	—

Table10-1 User Menu (31/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
MAINTENANCE MENU	POWER SAVE	ENABLE DISABLE	*	Sets Enable/Disable of Power Save Mode. Change the transition time to the energy saving mode by “USER MENU” - “SYSTEM CONFIG MENU” - “POW SAVE TIME”when Enable is set.	ET	○
	PAPER BLACK SET	0 +1 +2 -2 -1	*	Use it for fine adjustment of the significant dust attachment on the surface and when thin spot has the sighificant impact on the standard/BLACK printing or other cases occur. The decrement is necessary if the scattered or snow-white like printing is the result in the high density-printing area. The increment is necessary if the thin printing is found. Refer to “Int Range” sheet for the display condition. ※ PAPER BLACK SET is the same display as English even if it set other languages.	ET	○
	DARKNESS	0 +1 +2 -2 -1	*	Sets print darkness. (It is possible to change by “1” unit.)	ET	○
	CLEANING	PRINT		Print Cleaning Page. When the cleaning is printed, paper from which tray according to the setting of the paperfeed item. PJL command setting of the paper feed origin, and a detailed content: the PN286_7 system specifications (chapter of the outline).doc. Please refer in Chapter 14.1	ET	—
				[Conditions for display] “ENABLE” is selected in “ADMIN MENU” - “OP MENU” - “ALL CATEGORY”.		
PRINT STATISTICS	ENTER PASSWORD	****	0000	Enters a password to enter Print Statistics menu. The default value is “0000.” Refer to the “Password” sheet for detailed operation. ※ ”PRINT STATISTICS” category is not shown when Print Statistics function is not supported. (For OEM configuration, Print Statistics function default is not supported.)		—
PRINT STATISTICS	USAGE REPORT	ENABLE DISABLE	*	Switches over Enable/ Disable of Print Statistics function. If the setting is changed, the printer restarts.	RB	—
	RESET COUNTER	EXECUTE	*	It is reset Section Counter of Print Statistics function. If Execute is selected, exit from the menu. [Conditions for display] “ENABLE” is selected in “USER MENU” - “PRINT STATISTIC” - “USAGE REPORT”.	ET	—

Table10-1 User Menu (32/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
PRINT STATISTICS	GROUP COUNTER	ENABLE DISABLE	*	It is set whether to display the section counter in Usage Report Print. ENABLE : display, DISABLE : not display. [Conditions for display] "ENABLE" is selected in "USER MENU" - "PRINT STATISTICS" - "USAGE REPORT".	ET	—
	CHANGE PASSWORD		-	Changes a password. A new password can input after the display of "NEW PASSWORD" and "VERIFY PASSWORD" by pressing the Enter. [Conditions for display] "ENABLE" is selected in "USER MENU" - "PRINT STATISTICS" - "USAGE REPORT".	ET	—
	NEW PASSWORD	****	-	Sets a new password to enter "PRINT STATISTICS" menu. Refer to the "Password" sheet for detailed operation.	ET	—
	VERIFY PASSWORD	****	-	Makes User input the new password to enter "PRINT STATISTICS" set in "NEW PASSWORD" for confirmation. Refer to the "Password" sheet for detailed operation.	ET	—
				[Conditions for display] "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "ALL CATEGORY". "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "PASSWORD". Displayed only if the printer is PN287.		
CHANGE PASSWORD	NEW PASSWORD	****		Allows the password to be changed for the menu's lockout function. The underline indicates the entry position. A number from 0 to 9 and character from a to z can be entered for each digit. *It is possible to move between digits after entering a number.	ET	
	VERIFY PASSWORD			Verifies the above password. The underline indicates the entry position. A number from 0 to 9 and character from a to z can be entered for each digit.		
	INCORRECT PASSWORD			Indicates that the password change failed.		
				[Conditions for display] "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "ALL CATEGORY". "ENABLE" is selected in "ADMIN MENU" - "OP MENU" - "USAGE MENU".		

Table10-1 User Menu (33/33)

Category	Item	Value	Default	Function / Notes	Valid	Save
USAGE MENU	DRUM LIFE	REMAINING nnn%		Displays the remaining life of the BLACK drum in %. The value converted from the number of conventional Drum rotations is indicated on Engine Status Print only. (“nnn” in the Value column is a numeric value.)		—
	TONER (n.nK)	REMAINING nnn%		Displays the remaining toner amount in %. The remaining toner amount is estimated by print-dot-counting to display. When the sensor detects toner low, the remaining toner amount has reached a predetermined value. 0% is displayed when the remaining toner amount has reached a predetermined print-dot-count. When toner replacement (a status other than toner low) is detected during toner low status, 100% is displayed. (“nnn” in the Value column is a numeric value.) Display of “(n.nK)” in the Item column is capacity of toner cartridges installed in the printer. ex. 5.0K, 7.5K, 15.0K		—

10.2 Admin Menu

This MENU is disclosed to users.
Only system administrator users can have sccess to this MENU.

Table10-2 Admin Menu(1/5)

Category	Item	Value	Default	PJL	Function / Notes	Valid	Save
OP MENU	ALL CATEGORY	ENABLE DISABLE	*	OKIMENUALL=ENABLE [2 ENUMERATED] DISABLE ENABLE	Set up VALID/INVALID of all categories in USERS MENU. If INVALID is selected, USERS MENU except PRINTJOB MENU will not appear. The following each item will disappear if INVALID is selected. The PANEL LOCK will be attained by setting DISABLE of this MENU.	ET	—
	INFORMATION MENU	ENABLE DISABLE	*	OKIMENUINFORMATION =ENABLE [2 ENUMERATED] DISABLE ENABLE	Set up VALID/INVALID of INFORMATION MENU category. If selecting INVALID, INFORMATION MENU category of USERS MENU will disappear.	ET	—
	SHUTDOWN MENU	ENABLE DISABLE	*	OKIMENUSHUTDOWN =ENABLE [2 ENUMERATED] DISABLE ENABLE	Set up VALID/INVALID of SHUTDOWN MENU category. If selecting INVALID, SHUTDOWN MENU category of USERS MENU will disappear.	ET	—
	PRINT MENU	ENABLE DISABLE	*	OKIMENUPRINT =ENABLE [2 ENUMERATED] DISABLE ENABLE	Set up VALID/INVALID of PRINT MENU category. If selecting INVALID, PRINT MENU category of USERS MENU will disappear.	ET	—
	MEDIA MENU	ENABLE DISABLE	*	OKIMENUMEDIA =ENABLE [2 ENUMERATED] DISABLE ENABLE	Set up VALID/INVALID of MEDIA MENU category. If selecting INVALID, MEDIA MENU category of USERS MENU will disappear.	ET	—
	SYS CONFIG MENU	ENABLE DISABLE	*	OKIMENUSYSTEM =ENABLE [2 ENUMERATED] DISABLE ENABLE	Set up VALID/INVALID of SYSTEM CONFIG MENU category. If selecting INVALID, SYSTEM CONFIG MENU category of USERS MENU will disappear.	ET	—
	PCL EMULATION	ENABLE DISABLE	*	OKIMENUPCL=ENABLE [2 ENUMERATED] ENABLE DISABLE	Set up VALID/INVALID of PCL EMULATION MENU category. If selecting INVALID, PCL EMULATIONL MENU category of USERS MENU will disappear.	ET	—

Table10-2 Admin Menu(2/5)

Category	Item	Value	Default	PJL	Function / Notes	Valid	Save
OP MENU	PPR EMULATION	ENABLE DISABLE	*	OKIMENUPPR=ENABLE [2 ENUMERATED] ENABLE DISABLE	Set up VALID/INVALID of PPR EMULATION MENU category. If selecting INVALID, PPR EMULATION MENU category of USERS MENU will disappear. Displayed in overseas brands. [Display Condition] • "SYSTEM MAINTENANCE" - "PERSONALITY" - "IBM PPR III XL"should be "ENABLE".	ET	—
	FX EMULATION	ENABLE DISABLE	*	OKIMENUFX=ENABLE [2 ENUMERATED] ENABLE DISABLE	Set up VALID/INVALID of FX EMULATION MENU category. If selecting INVALID, FX EMULATION MENU category of USERS MENU will disappear. Displayed in overseas brands. [Display Condition] • "SYSTEM MAINTENANCE" - "PERSONALITY" - "EPSON FX"should be"ENABLE".	ET	—
	ESC/P EMULATION	ENABLE DISABLE	*	OKIMENUESCP=ENABLE [2 ENUMERATED] ENABLE DISABLE	Set up VALID/INVALID of ESC/P MENU category. If selecting INVALID, ESC/P MENU category of USERS MENU will disappear. Displayed only domestic brands. [Display Condition] • "SYSTEM MAINTENANCE" - "PERSONALITY" - "ESC/P"should be"ENABLE".	ET	—
	PARALLEL MENU	ENABLE DISABLE	*	OKIMENUPARALLEL =ENABLE [2 ENUMERATED] DISABLE ENABLE	Set up VALID/INVALID of PARALLEL MENU category. If selecting INVALID, PARALLEL MENU category of USERS MENU will disappear.	ET	—
	USB MENU	ENABLE DISABLE	*	OKIMENUUSB=ENABLE [2 ENUMERATED] DISABLE ENABLE	Set up VALID/INVALID of USB MENU category. If selecting INVALID, USERS MENU of USERS MENU category will disappear.	ET	—
	NETWORK MENU	ENABLE DISABLE	*	OKIMENUPCINIC =ENABLE [2 ENUMERATED] DISABLE ENABLE	Set up VALID/INVALID of NETWORK MENU category. If selecting INVALID, USERS MENU of NETWORK MENU category will disappear. [Display Condition] • NIC installment	ET	—
	MEMORY MENU	ENABLE DISABLE	*	OKIMENUMEMORY =DISABLE [2 ENUMERATED] DISABLE ENABLE	Set up VALID/INVALID of MEMORY MENU category. If selecting INVALID, USERS MENU of MEMORY MENU category will disappear.	ET	—

Table10-2 Admin Menu(3/5)

Category	Item	Value	Default	PJL	Function / Notes	Valid	Save
OP MENU	SYS ADJUST MENU	ENABLE DISABLE	*	OKIMENUSYSTEMADJUST =DISABLE [2 ENUMERATED] DISABLE ENABLE	Set up VALID/INVALID of SYSTEM ADJUSTMENT MENU category. If selecting INVALID, USERS MENU of SYSTEM ADJUSTMENT MENU category will disappear.	ET	—
	MAINTENANCE MENU	ENABLE DISABLE	*	OKIMENUMAINTENANCE =ENABLE [2 ENUMERATED] DISABLE ENABLE	Set up VALID/INVALID of MAINTENANCE MENU category. If selecting INVALID, USERS MENU of MEINTENANCE MENU category will disappear.	ET	—
	USAGE MENU	ENABLE DISABLE	*	OKIMENUUSAGE=ENABLE [2 ENUMERATED] DISABLE ENABLE	Set up VALID/INVALID of USAGE MENU category. If selecting INVALID, USERS MENU of USAGE MENU category will disappear.	ET	—
	MENU LOCKOUT	ENABLE DISABLE	*	OKIOPMENUPASSWORD =DISABLE [2 ENUMERATED] ENABLE DISABLE	Set up VALID/INVALID of the menu's lockout function. If selecting INVALID, USERS MENU of PASSWORD category and CHGNGE-PASSWORD category will disappear. The initial value of PASSWORD is "aaaa".	ET	—
	PANEL LOCKOUT	ENABLE DISABLE	*	OKIPANELLOCKOUT =DISABLE [2 ENUMERATED] ENABLE DISABLE	Set up VALID/INVALID of the panel's lockout function. If selecting VALID, only the ONLINE switch becomes effective in the menu and doesn't enter the menu.	ET	—
CONFIG MENU	NEARLIFE LED	ENABLE DISABLE	*	OKINEARLIFELED=ENABLE [2 ENUMERATED] ENABLE DISABLE	Conducts the settings of LED lighting control when NearLife warning of a toner, drum, fuser, or belt occurs. Attention LED is lighted when ENABLE. Attention LED is not lighted when DISABLE. (Displays LCD message.) The status (Life warning) of temporal recovery by opening and closing of the cover in Life error is not included.	ET	—
FILE SYS MAINTE1				None	[Display Condition] • "ADMIN MENU" - "FILE SYS MAINTE2" - "INITIAL LOCK"should be "NO".		

Table10-2 Admin Menu(4/5)

Category	Item	Value	Default	PJL	Function / Notes	Valid	Save
FILE SYS MAINTE1	FLASH INITIALIZE	EXECUTE	-	OKIINITIALIZE FLASH1/ FLASH2 FLASH1is for PM_DIMM1_FLASH_INITIALIZE_ID. (FLASH in SLOT1.) FLASH2 is for PM_DIMM2_FLASH_INITIALIZE_ID. (FLASH in SLOT2.)	Initialize the resident FLASH. The following message appears by pressing Enter switch. ARE YOU SURE? YES/NO If NO is selected, it will go back to the source menu. And if YES is selected, It will be automatically rebooted and initialize the FLASH memory.	RB	—
FILE SYS MAINTE2	INITIAL LOCK	YES NO	*	OKIDISKINITIALLOCK = ON [2 ENUMERATED] OFF ON	If selecting "YES", it will disappear the item of ADMIN MENU" - "FILE SYS MAINTE1". [Display Codition] • "USER MENU"-"PRINT STATISTICS"-"USAGE REPORT"should be "DISABLE".	ET	—
PS MENU	L1 TRAY	TYPE1 TYPE2	*	OKIPSTRAYNUMBER =TYPE1 [2 ENUMERATED] TYPE1 TYPE2	The tray selection number of level 1 operator for TYPE1 setting from 1 is valid and from 0 for TYPE2 setting.	RB	—
SIDM MENU	SIDM MANUAL ID#	0 ~ 2 ~ 9	*J *E	MEDIASRCSIDMMANUAL =2 [2 RANGE] 0 9	Set up Pn specified in MANUAL by MANUAL-1 ID No.FX/PPR/ESCP Emu in CSFcontrol command (ESC EM Pn). Refer to "Int Range"sheet for the displayed condition.	ET	—
	SIDM MANUAL2 ID#	0 ~ 3 ~ 9	*	MEDIASRCSIDMMANUAL2 =3 [2 RANGE] 0 9	Set up Pn specified MANUAL by MANUAL-2 ID No.FX/PPR Emu in CSF control command(ESC EM Pn). Refer to "Int Range"sheet for the displayed condition.	ET	—
	SIDM MP TRAY ID#	0 ~ 4 ~ 9	*	MEDIASRCSIDMINTRAY1 =4 [2 RANGE] 0 9	Set up Pn specified TRAYO(MP Tray) by MP Tray ID No.FX/PPR/ESCP Emu in CSF control command(ESC EM Pn). Refer to "Int Range"sheet for the displayed condition.	ET	—
	SIDM TRAY1 ID#	0 1 ~ 9	*	MEDIASRCSIDMINTRAY2 =1 [2 RANGE] 0 9	Set up Pn specified TRAY 1by Tray 1 ID No.FX/PPR/ ESCP Emu in CSF control command(ESC EM Pn). Refer to "Int Range"sheet for the displayed condition.	ET	—
	SIDM TRAY2 ID#	0 ~ 2 ~ 5 ~ 9	*J *E	MEDIASRCSIDMINTRAY3 =5 [2 RANGE] 0 9	Set up Pn specified TRAY 2by Tray 2 ID No.FX/PPR/ ESCP Emu in CSF control command(ESC EM Pn). Refer to "Int Range"sheet for the displayed condition. [Display Condition] • Tray 2 installment	ET	—

Table10-2 Admin Menu(5/5)

Category	Item	Value	Default	PJL	Function / Notes	Valid	Save
LANGUAGE MENU	LANG INITIALIZE	EXECUTE	-	OKIRESOURCEREADDATA LOCATION="DownloadMessage:initializeMessage" SIZE=0	Initialize the message file loaded in FLASH. The following message for confirmation will appear by pressing Enter switch. ARE YOU SURE? YES/NO If NO is selected, it will go back to the source menu. The procedure for clearing disk will start immediately after the menu and rebooting. Only the printer which support muilty languages DOWNLOAD model support this menu.	RB	—

10.3 Factory Default

Table10-3 Factory Default (1/4)

Category	Item(1st Line)	ODA/INTL DEFAULT	OEL/INTA DEFAULT	
PRINT MENU	COPIES	1	1	
	DUPLEX	OFF	OFF	
	BINDING	LONG EDGE	LONG EDGE	
	MANUAL	OFF	OFF	PN286
	PAPER FEED	TRAY1	TRAY1	
	AUTO TRAY SWITCH	ON	ON	
	TRAY SEQUENCE	DOWN	DOWN	
	MP TRAY USAGE	DO NOT USE	DO NOT USE	PN287
	MEDIA CHECK	ENABLE	ENABLE	
	RESOLUTION	600DPI	600DPI	
	TONER SAVE MODE	OFF	OFF	
	ORIENTATION	PORTRAIT	PORTRAIT	
	LINES PER PAGE	60 LINES	64 LINES	
	EDIT SIZE	CASSETTE SIZE	CASSETTE SIZE	
MEDIA MENU	TRAY1 PAPERSIZE	LETTER	A4	
	TRAY1 MEDIATYPE	PLAIN	PLAIN	
	TRAY1MEDIAWEIGHT	MEDIUM	MEDIUM	
	TRAY2 PAPERSIZE	LETTER	A4	2nd tray installed
	TRAY2 MEDIATYPE	PLAIN	PLAIN	2nd tray installed
	TRAY2MEDIAWEIGHT	MEDIUM	MEDIUM	2nd tray installed
	MPT PAPERSIZE	LETTER	A4	PN287
	MPT MEDIATYPE	PLAIN	PLAIN	PN287
	MPT MEDIAWEIGHT	M LIGHT	M LIGHT	PN287
	MN PAPERSIZE	LETTER	A4	PN286
	MN MEDIATYPE	PLAIN	PLAIN	PN286
	MN MEDIAWEIGHT	MEDIUM	MEDIUM	PN286
	UNIT OF MEASURE	INCH	MILLIMETER	
	X DIMENSION	8.5 INCH	210 MILLIMETER	
	Y DIMENSION	11 INCH	297 MILLIMETER	
SYS CONFIG MENU	POW SAVE TIME	10 MIN	10 MIN	
	PERSONALITY	AUTO EMULATION	AUTO EMULATION	
	PARA PS-PROTOCOL	ASCII	ASCII	
	USB PS-PROTOCOL	RAW	RAW	
	NET PS-PROTOCOL	RAW	RAW	
	CLRABLE WARNING	ONLINE	ONLINE	
	AUTO CONTINUE	OFF	OFF	PN287
	AUTO CONTINUE	ON	ON	PN286
	MANUAL TIMEOUT	60 SEC	60 SEC	

Table10-3 Factory Default (2/4)

Category	Item(1st Line)	ODA/INTL DEFAULT	OEL/INTA DEFAULT	
SYS CONFIG MENU	TIMEOUT INJOB	40 SEC	40 SEC	
	TIMEOUT LOCAL	40 SEC	40 SEC	
	TIMEOUT NET	90 SEC	90 SEC	
	LOW TONER	CONTINUE	CONTINUE	
	JAM RECOVERY	ON	ON	
	ERROR REPORT	OFF	OFF	
PCL EMULATION	FONT SOURCE	RESIDENT	RESIDENT	
	FONT No.	IO	IO	
	FONT PITCH	10.00 CPI	10.00 CPI	
	FONT HEIGHT	12.00 POINT	12.00 POINT	
	SYMBOL SET	PC-8	PC-8	
	A4 PRINT WIDTH	78 COLUMN	78 COLUMN	
	WHITE PAGE SKIP	OFF	OFF	
	CR FUNCTION	CR	CR	
	LF FUNCTION	LF	LF	
	PRINT MARGIN	NORMAL	NORMAL	
	PEN WIDTH ADJUST	ON	ON	
	PCL MNID	2	2	PN286
	PCL T0ID	4	4	
	PCL T1ID	1	1	
	PCL T2ID	5	5	
PPR EMULATION	CHARACTER PITCH	10 CPI	10 CPI	
	FONT CONDENSE	12CPI to 20CPI	12CPI to 20CPI	
	CHARACTER SET	SET-2	SET-2	
	SYMBOL SET	IBM-437	IBM-437	
	LETTER 0 STYLE	DISABLE	DISABLE	
	ZERO CHARACTER	NORMAL	NORMAL	
	LINE PITCH	6 LPI	6 LPI	
	WHITE PAGE SKIP	OFF	OFF	
	CR FUNCTION	CR	CR	
	LF FUNCTION	LF	LF	
	LINE LENGTH	80 COLUMN	80 COLUMN	
	FORM LENGTH	11 INCH	11.7 INCH	
PPR EMULATION	TOF POSITION	0.0 INCH	0.0 INCH	
	LEFT MARGIN	0.0 INCH	0.0 INCH	
	FIT TO LETTER	ENABLE	DISABLE	
	TEXT HEIGHT	SAME	SAME	
FX EMULATION	CHARACTER PITCH	10 CP	10 CP	
	CHARACTER SET	IBM-437	IBM-437	
	LETTER 0 STYLE	DISABLE	DISABLE	
	ZERO CHARACTER	NORMAL	NORMAL	
	LINE PITCH	6 LPI	6 LPI	
	WHITE PAGE SKIP	OFF	OFF	

Table10-3 Factory Default (3/4)

Category	Item(1st Line)	ODA/INTL DEFAULT	OEL/INTA DEFAULT	
FX EMULATION	CR FUNCTION	CR	CR	
	LINE LENGTH	80 COLUMN	80 COLUMN	
	FORM LENGTH	11 INCH	11.7 INCH	
	TOF POSITION	0.0 INCH	0.0 INCH	
	LEFT MARGIN	0.0 INCH	0.0 INCH	
	FIT TO LETTER	ENABLE	DISABLE	
	TEXT HEIGHT	SAME	SAME	
PARALLEL MENU	PARALLEL	ENABLE	ENABLE	
	BI-DIRECTION	ENABLE	ENABLE	
	ECP	ENABLE	ENABLE	
	ACK WIDTH	NARROW	NARROW	
	ACK/BUSY TIMING	ACK IN BUSY	ACK IN BUSY	
	I-PRIME	DISABLE	DISABLE	PN287
	I-PRIME	3 MICRO SEC	3 MICRO SEC	PN286
	OFFLINE RECEIVE	DISABLE	DISABLE	
USB MENU	SOFT RESET	DISABLE	DISABLE	PN287
	SOFT RESET	ENABLE	ENABLE	PN286
	SPEED	480Mbps	480Mbps	
	OFFLINE RECEIVE	DISABLE	DISABLE	
	SERIAL NUMBER	ENABLE	ENABLE	
NETWORK MENU	TCP/IP	ENABLE	ENABLE	
	IP VERSION	IP v4	IP v4	
	NETBEUI	ENABLE	ENABLE	
	NETWARE	ENABLE	ENABLE	
	ETHERTALK	ENABLE	ENABLE	
	FRAME TYPE	AUTO	AUTO	
	IP ADDRESS SET	AUTO	AUTO	
	IP ADDRESS	◆ cable connected 169.254.XXX.XXX ◆ not cable connected 192.168.100.100	◆ cable connected 169.254.XXX.XXX ◆ not cable connected 192.168.100.100	
	SUBNET MASK	◆ cable connected 255.255.0.0 ◆ not cable connected 255.255.255.0	◆ cable connected 255.255.0.0 ◆ not cable connected 255.255.255.0	
	GATEWAY ADDRESS	◆ cable connected 0.0.0.0 ◆ not cable connected 192.168.100.254	◆ cable connected 0.0.0.0 ◆ not cable connected 192.168.100.254	
	WEB	ENABLE	ENABLE	
	TELNET	DISABLE	DISABLE	
	FTP	DISABLE	DISABLE	
	NETWORK SCALE	NORMAL	NORMAL	
	HUB LINK SETTING	AUTO NEGOTIATE	AUTO NEGOTIATE	
MEMORY MENU	RECEIVE BUF SIZE	AUTO	AUTO	
	RESOURCE SAVE	OFF	OFF	

Table10-3 Factory Default (4/4)

Category	Item(1st Line)	ODA/INTL DEFAULT	OEL/INTA DEFAULT	
SYS ADJUST MENU	X ADJUST	0.00 MILLIMETER	0.00 MILLIMETER	
	Y ADJUST	0.00 MILLIMETER	0.00 MILLIMETER	
	DUPLEX X ADJUST	0.00 MILLIMETER	0.00 MILLIMETER	
	DUPLEX Y ADJUST	0.00 MILLIMETER	0.00 MILLIMETER	
	PLACE PAGE	CENTER	CENTER	
MAINTENANCE MENU	POWER SAVE	ENABLE	ENABLE	
	PAPER BLACK SET	0	0	
	DARKNESS	0	0	

11. LOCAL PRINTING OFF-LINE PRINTING

11.1 Local Print

The following two types of local print are supported.

(a) Menu print
(b) Demo print

11.1.1 Menu Print

(1) Purpose
   (a) Current user default setting are printed, so that a user can easily operate the menu setting.
   (b) Printing the firmware revision can make the maintenance for the maker easy.

(2) Details
   (a) Firmware revision, Font revision and total RAM capacity are printed.
   (b) Current user default setting are printed.
   (c) Printing is performed in each menu-selected language.
   (d) When ENABLE is set for PAGE PRT in the system maintenance menu, Paper Count is output.

(3) Constraint
   (a) The specification of the number of copies is disabled.

(4) Operation
   (a) Refer to section 8.3.

11.1.2 Demo Print

(1) Purpose
   (a) Mainly for the demonstration for products, the printing is performed in store fronts or-shows.

(2) Details
   (a) Noted separately

(3) Constraint
   (a) Either papers of A4 or letter should be installed in the Tray.

(4) Operation
   (a) Refer to section 8.3.

11.2 Cleaning Print

(1) Purpose
This printer has cleaning function for operator handling to remove contaminants inside the printer.

(2) Operation
(a) Execute the "CLEANING PRINT" of MAINTE MENU.
(b) Make sure that the printer requests a LETTER (or A4) paper insertion from the Manual Feed Slot.
(c) User inserts a paper from the Manual Feed Slot.
(d) Toner which has formed on the drum is transferred to the paper and be printed out. LED becomes the indication which shows during printing.

11.3 Font Print

(1) Purpose
To provide the users with print samples of all the available fonts and to make it easier to designate user default font from the Menu.

(2) Contents
(a) All Resident Fonts are printed.
(b) If Soft Fonts of permanent attributes are downloaded, all Permanent Soft Fonts are printed. Soft Font of temporary attributes are not printed.
(c) All Fonts can be printed in either Portrait or Landscape orientation through rotation, but in Font Print, samples of all Font types physically stored in the memory are printed. In other words, if Landscape Download Fonts, etc. exist in the printer, Landscape pages are also output.

(3) Limitations
(a) MENU items for PCL are printed.
(b) When paper size is small, the default paper request is displayed.

(4) Operation
Refer to section 8.3.

12. SPECIAL MAINTENANCE

12.1 User Maintenance Mode

Refer to the clause of a user menu.

12.2 System Maintenance Mode (It isn't disclosed to the user.)

(1) Shift to System Maintenance Mode
A shift to the system maintenance mode is made by PJL command.

(2) System Maintenance Mode functions

Table12-1 System Maintenance Menu (1/4)

Category	Item	Value	Default	PJL	Function / Notes	Valid	Save
OKIUSER	OKIUSER	ODA OEL APS JP1 JPOEM1 OEMA OEML	*	OKIUSER=ODA [7 ENUMERATED] ODA OEL APS JP1 JPOEM1 OEMA OEML	Specifies a brand. JPOEM1: OEM to Japan OEMA: OEM to abroad for A4 paper default OEML: OEM to abroad for Letter paper default Reboots automatically after going through the menu. WhenJapanese Font is installed,theDefault value become JP1.	RB	–
MAINT ENANCE MENU	FLASH FORMAT	EXECUTE	-	OKIINITIALIZE FLASHFORMAT	Formats Flash ROM. When executed, exits Menu and starts formatting a flash device installed to resident (onboard).	ET	–
	MENU RESET	EXECUTE	-	OKIRESET CUEEPROM	Resets a content of EEPROM to the factory default. Reboots automatically after changing the setting. a particular item is not initialized.	RB	–
CONFIG MENU	CODESET	TYPE1 TYPE2	*	OKICODESET =TYPE1 [2 ENUMERATED] TYPE1 TYPE2	This menu needs to be displayed for all brands. TYPE1: does not display Russian or Greek. TYPE2: Display Russian or Greek It will be rebooted after existing from the menu. TYPE 2 is the default value for OEL/APS/OEMA brands and TYPE 1 for other brands.	RB	–
TEST PRINT MENU	TEST PRINT MENU	ENABLE DISABLE	*	OKITESTPR-INTMENU =DISABLE [2 ENUMERATED] ENABLE DISABLE	If this item is "DISABLE", "ENG STATUS PRINT" will not be displayed.	RB	–

Table12-1 System Maintenance Menu (2/4)

Category	Item	Value	Default	PJL	Function / Notes	Valid	Save
FUSE KEEP MODE	FUSE KEEP MODE	EXECUTE	-	Mone	It will be ONLINE by pressing ENTER key which issues the command from CU to PU. Check for the operation while changing the factories supplies during keeping the power ON. A new fuse will not cut and the count-operation will not be included in the old value). The check mode will finish and invalid if turing the power ON.	ET	–
PERSO NALITY	PCL	ENABLE DISABLE	*	OKIPCL=ENABLE [2 ENUMERATED] ENABLE DISABLE	Changes the default of Support PDL per brand. PDL which is "DISABLE" in this menu is not displayed at "SYS CONFIG MENU" - "PERSONALITY" of "USER MENU". (There is no change in the face about DISABLE because it doesn't have a special menu about PCL XL.) INVALID DATA shows up and received data is abandoned when print data of PDL which is "DISABLE" is received. The operation will not be guaranteed if setting IBM PPR III XL and EPSON FX to ENABLE for domestic brand and ESC/P to ENABLE for overseas brand. PS3EMU does not appear in Non-PS models. It is impossible to set the DISABLE to the PCL .(Always ,Use it with ENALBE. Receiveing data is processed even if PCL is set DISABLE.)It is Read Only. (T.B.D)	RB	–
	IBM PPR III XL	ENABLE DISABLE	*E *J	OKIIBMPPR= ENABLE [2 ENUMERATED] ENABLE DISABLE		RB	–
	EPSON FX	ENABLE DISABLE	*E *J	OKIEPSONFX= ENABLE [2 ENUMERATED] ENABLE DISABLE		RB	–
	ESC/P	ENABLE DISABLE	*J *E	OKIESCP=DISABLE [2 ENUMERATED] ENABLE DISABLE		RB	–
	PS3 EMU-LATION	ENABLE DISABLE	*	OKIPOSTSCRIPT =ENABLE [2 ENUMERATED] ENABLE DISABLE		RB	–
	PCL XL	ENABLE DISABLE	*	OKIPCLXL=ENABLE [2 ENUMERATED] ENABLE DISABLE		RB	–
ROLLING ASCII	ROLLING ASCII	EXECUTE		Mone	PRINTING Rolling ASCII Continuous Print Continuously prints Rolling ASCII patterns for various types continuous testing on the maker side. (Noise test, engine test). Press the “ENTER” button in the menu, and the "EXECUTE" is displayed in the lower position of LCD, then press the "ENTER" button to confirm execution, when the "ON-LINE" button is pressed and initialization is completed, the ASCII characters start to print continuously. End of this mode by pressing the “ON-LINE" switch,After stoping the printing,shut down the power or press the CANCEL switch. It is not possible to return to other maintenance modes after this operation.	ET	–

Table12-1 System Maintenance Menu (3/4)

Category	Item	Value	Default	PJL	Function / Notes	Valid	Save
DOTSHIFT	TRAY1	-4.0MILLIMETER ~ -1.5MILLIMETER -1.0MILLIMETER -0.5MILLIMETER 0.0MILLIMETER +0.5MILLIMETER ~ +3.5MILLIMETER	*	OKIDOTSHIFTT-RAY2=0 [16 ENUMERATED] -4.0 -3.5 -3.0 -2.5 -2.0 -1.5 -1.0 -0.5 0 0.5 1.0 1.5 2.0 2.5 3.0 3.5	Set the dot shift for the horizontal direction when printing from Tray1. This area will not be initialized by the EEPROM reset operation.	PW	—
	TRAY2	-4.0MILLIMETER ~ -1.5MILLIMETER -1.0MILLIMETER -0.5MILLIMETER 0.0MILLIMETER +0.5MILLIMETER ~ +3.5MILLIMETER	*	OKIDOTSHIFTT-RAY3=-1.5 [16 ENUMERATED] -4.0 -3.5 -3.0 -2.5 -2.0 -1.5 -1.0 -0.5 0 0.5 1.0 1.5 2.0 2.5 3.0 3.5	Set the dot shift for the horizontal direction when printing from Tray2. This item is displayed even when Tray2 is not set. This area will not be initialized by the EEPROM reset operation. (At first, it is initialized by default.)	PW	—
	MANUAL	-4.0MILLIMETER ~ -1.5MILLIMETER -1.0MILLIMETER -0.5MILLIMETER 0.0MILLIMETER +0.5MILLIMETER ~ +3.5MILLIMETER	*	OKIDOTSHIFT-TRAY1=-1.0 [16 ENUMERATED] -4.0 -3.5 -3.0 -2.5 -2.0 -1.5 -1.0 -0.5 0 0.5 1.0 1.5 2.0 2.5 3.0 3.5	Set the dot shift for the horizontal direction when printing from the manual slot. This area will not be initialized by the EEPROM reset operation. (At first, it is initialized by default.) Displayed only if the printer is PN286.	PW	—

Table12-1 System Maintenance Menu (4/4)

Category	Item	Value	Default	PJL	Function / Notes	Valid	Save
	MPT	-4.0MILLIMETER ~ -1.5MILLIMETER -1.0MILLIMETER -0.5MILLIMETER 0.0MILLIMETER +0.5MILLIMETER ~ +3.5MILLIMETER	*	OKIDOTSHIFT-TRAY1=-1.0 [16 ENUMERATED] -4.0 -3.5 -3.0 -2.5 -2.0 -1.5 -1.0 -0.5 0 0.5 1.0 1.5 2.0 2.5 3.0 3.5	Set the dot shift for the horizontal direction when printing from the MPT. This area will not be initialized by the EEPROM reset operation. (At first, it is initialized by default.) Displayed only if the printer is PN287.	PW	–
ENGINE DIAG MODE			-		Enters self-diagnosis mode of the engine.	ET	–

13. OUTLINE OF CONTROL COMMANDS

13.1 HP PCL5e Control Codes

Table13-1 HP PCL5e Control Codes(1/3)

Code	Hexadecimal	Decimal	Function
BS	08	08	Back Space
HT	09	09	Horizontal Tab
LF	0A	10	Line Feed
FF	0C	12	Form Feed
CR	0D	13	Carriage Return
SO	0E	14	Select Secondary Font
SI	0F	15	Select Primary Font
ESC % # A	1B 25 # 41	27 37 # 65	Enter PCL Mode
ESC % # B	1B 25 # 42	27 37 # 66	Enter HP-GL/2 Mode
ESC % - 12345X	1B 25 2D 31 32 33 34 35 58	27 37 45 49 50 51 52 53 88	Universal Exit Language
ESC & EM	1B 26 19	27 38 25	Reception and eliminate data
ESC & a # C	1B 26 61 # 43	27 38 97 # 67	Cursor Position by Column
ESC & a # H	1B 26 61 # 48	27 38 97 # 72	Horizontal Position by Decipoint
ESC & a # L	1B 26 61 # 4C	27 38 97 # 76	Set Left Margin
ESC & a # M	1B 26 61 # 4D	27 38 97 # 77	Set Right Margin
ESC & a # P	1B 26 61 # 50	27 38 97 # 80	Print Direction
ESC & a # R	1B 26 61 # 52	27 38 97 # 82	Cursor Position by Row
ESC & a # V	1B 26 61 # 56	27 38 97 # 86	Vertical Position by Decipoint
ESC & d # D	1B 26 61 # 44	27 38 100 # 68	Underline ON (#=3: Floating)
ESC & d @	1B 26 64 40	27 38 100 64	Underline OFF
ESC & f # S	1B 26 66 # 53	27 38 102 # 83	Cursor Push/Pop
ESC & f # X	1B 26 66 # 58	27 38 102 # 88	Macro Control
ESC & f # Y	1B 26 66 # 59	27 38 102 # 89	Macro ID
ESC & k # G	1B 26 6B # 47	27 38 107 # 71	Line Termination
ESC & k # H	1B 26 6B # 48	27 38 107 # 72	Horizontal Motion Index
ESC & k # S	1B 26 6B # 53	27 38 107 # 83	Font Pitch Selection (Alternate Method)
ESC & l # A	1B 26 6C # 41	27 38 108 # 65	Page Size
ESC & l # C	1B 26 6C # 43	27 38 108 # 67	Vertical Motion Index
ESC & l # D	1B 26 6C # 44	27 38 108 # 68	Line Spacing
ESC & l # E	1B 26 6C # 45	27 38 108 # 69	Set Top Margin
ESC & l # F	1B 26 6C # 46	27 38 108 # 70	Set Text Length
ESC & l # H	1B 26 6C # 48	27 38 108 # 72	Paper Input Control
ESC & l # L	1B 26 6C # 4C	27 38 108 # 76	Skip Over Perforation
ESC & l # O	1B 26 6C # 4F	27 38 108 # 79	Page Orientation
ESC & l # U	1B 26 6C # 55	27 38 108 # 85	Left Offset Registration
ESC & l # X	1B 26 6C # 58	27 38 108 # 88	Select Number of Copies
ESC & l # Z	1B 26 6C # 5A	27 38 108 # 90	Top Offset Registration
ESC & p # X [data]	1B 26 70 # 58 [data]	27 38 112 # 88 [data]	Transparent Print Data
ESC & r # F	1B 26 75 # 46	27 38 114 # 70	Flush All Pages
ESC & s # C	1B 26 75 # 43	27 38 115 # 67	End-of-Line Wrap
ESC & u # D	1B 26 75 # 44	27 38 117 # 68	Unit of Measure

: ASCII Type number 'ID' : ASCII numeric and Alphabet [data] : Binary data

Table13-1 HP PCL5e Control Codes(2/3)

Code	Hexadecimal	Decimal	Function
ESC ('ID'	1B 28 'ID'	27 40 "ID'	Primary Font Symbol set Selection
ESC (# @	1B 28 # @	27 40 # 64	Primary Font Default
ESC (# X	1B 28 # 58	27 40 # 88	Primary Font Selection by ID
ESC (f # W [data]	1B 28 66 # 57 [data]	27 40 102 # 87 [data]	Define Symbol Set
ESC (s # B	1B 28 73 # 42	27 40 115 # 66	Primary Font Stroke Weight Selection
ESC (s # H	1B 28 73 # 48	27 40 115 # 72	Primary Font Pitch Selection
ESC (s # P	1B 28 73 # 50	27 40 115 # 80	Primary Font Spacing Selection
ESC (s # S	1B 28 73 # 53	27 40 115 # 83	Primary Font Style Selection
ESC (s # T	1B 28 73 # 54	27 40 115 # 84	Primary Font Typeface Selection
ESC (s # V	1B 28 73 # 56	27 40 115 # 86	Primary Font Height Selection
ESC (s # W [data]	1B 28 73 # 57 [data]	27 40 115 # 87 [data]	Download One Character
ESC) 'ID'	1B 29 'ID'	27 41 'ID'	Secondary Font Symbol Set Selection
ESC) # @	1B 29 # @	27 41 # 64	Secondary Font Default
ESC) # X	1B 29 # 58	27 41 # 88	Secondary Font Selection by ID
ESC) s # B	1B 29 73 # 42	27 41 115 # 66	Secondary Font Stroke Weight Selection
ESC) s # H	1B 29 73 # 48	27 41 115 # 72	Secondary Font Pitch Selection
ESC) s # P	1B 29 73 # 50	27 41 115 # 80	Secondary Font Spacing Selection
ESC) s # S	1B 29 73 # 53	27 41 115 # 83	Secondary Font Style Selection
ESC) s # T	1B 29 73 # 54	27 41 115 # 84	Secondary Font Typeface Selection
ESC) s # V	1B 29 73 # 56	27 41 115 # 86	Secondary Font Height Selection
ESC) s # W [data]	1B 29 73 # 57 [data]	27 41 115 # 87 [data]	Create Font Header
ESC * b # M	1B 2A 62 # 4D	27 42 98 # 77	Set Raster Compression Mode
ESC * b # W [data]	1B 2A 62 # 57 [data]	27 42 98 # 87 [data]	Transfer Raster Data
ESC * b # Y	1B 2A 62 # 59	27 42 98 # 89	Raster Y Offset
ESC * c # A	1B 2A 63 # 41	27 42 99 # 65	Horizontal Rule/Pattern Size by PCL Unit
ESC * c # B	1B 2A 63 # 42	27 42 99 # 66	Vertical Rule/Pattern Size by PCL Unit
ESC * c # D	1B 2A 63 # 44	27 42 99 # 68	Specify Font ID
ESC * c # E	1B 2A 63 # 45	27 42 99 # 69	Specify Character Code
ESC * c # F	1B 2A 63 # 46	27 42 99 # 70	Font Control
ESC * c # G	1B 2A 63 # 47	27 42 99 # 71	Rectangular Fill Pattern ID
ESC * c # H	1B 2A 63 # 48	27 42 99 # 72	Horizontal Rule/Pattern Size by Decipoint
ESC * c # K	1B 2A 63 # 4B	27 42 99 # 75	HP-GL/2 Plot Horizontal Size
ESC * c # L	1B 2A 63 # 4C	27 42 99 # 76	HP-GL/2 Plot Vertical Size
ESC * c # P	1B 2A 63 # 50	27 42 99 # 80	Pattern Rule
ESC * c # Q	1B 2A 63 # 51	27 42 99 # 81	Pattern Control
ESC * c # R	1B 2A 63 # 52	27 42 99 # 82	Specify Symbol Set ID Code
ESC * c # S	1B 2A 63 # 53	27 42 99 # 83	Symbol Set Control
ESC * c # V	1B 2A 63 # 56	27 42 99 # 86	Vertical Rule/Pattern Size by Decipoint
ESC * c # W [data]	1B 2A 63 # 57 [data]	27 42 99 # 87 [data]	User-Defined Pattern
ESC * c # X	1B 2A 63 # 58	27 42 99 # 88	Horizontal Picture Frame Size (Decipoints)
ESC * c # Y	1B 2A 63 # 59	27 42 99 # 89	Vertical Picture Frame Size (Decipoints)
ESC * c O T	1B 2A 63 30 54	27 42 99 0 84	Set Picture Frame Anchor Point
ESC * p # R	1B 2A 70 # 52	27 42 112 # 82	Set Pattern Reference Point
ESC * p # X	1B 2A 70 # 58	27 42 112 # 88	Horizontal Cursor Position by PCL Unit
ESC * p # Y	1B 2A 70 # 59	27 42 112 # 89	Vertical Cursor Position by PCL Unit

: ASCII Type number 'ID' : ASCII numeric and Alphabet [data] : Binary data

Table13-1 HP PCL5e Control Codes(3/3)

Code	Hexadecimal	Decimal	Function
ESC * r # A	1B 2A 72 # 41	27 42 114 # 65	Start Raster Graphics
ESC * r # F	1B 2A 72 # 46	27 42 114 # 70	Raster Graphics Presentation Mode
ESC * r # S	1B 2A 72 # 53	27 42 114 # 83	Raster Width
ESC * r # T	1B 2A 72 # 54	27 42 114 # 84	Raster Height
ESC * r B	1B 2A 72 42	27 42 114 66	End Raster Graphics
ESC * r C	1B 2A 72 43	27 42 114 67	End Raster Graphics and Compression mode
ESC / t # R	1B 2F 74 # 52	27 47 116 # 82	Raster Density
ESC * s # I	1B 2A 73 # 49	27 42 115 # 73	Inquire Status Readback Entity
ESC * s # T	1B 2A 73 # 54	27 42 115 # 84	Set Status Readback Location Type
ESC * s # U	1B 2A 73 # 55	27 42 115 # 85	Set Status Readback Location Unit
ESC * s # X	1B 2A 73 # 58	27 42 115 # 88	EchoFree Space
ESC * s 1 M	1B 2A 73 1 4D	27 42 115 1 77	Raster Graphics Resolution
ESC * t # R	1B 2A 74 # 52	27 42 116 # 82	Source Transparency Mode
ESC * v # N	1B 2A 76 # 4E	27 42 118 # 78	Pattern Transparency Mode
ESC * v # O	1B 2A 76 # 4F	27 42 118 # 79	Select Current Pattern
ESC * v # T	1B 2A 76 # 54	27 42 118 # 84	USPS PostNet
ESC * v # W [data]	1B 2F 62 # 57 [data]	27 47 98 # 87 [data]	Specify Multi-copy Mark
ESC / m # M	1B 2F 6D # 4D	27 47 109 # 77	Multi-copy Start
ESC / m # S	1B 2F 6D # 53	27 47 109 # 83	Multi-copy end
ESC / m E	1B 2F 6D 45	27 47 109 69	Clear Horizontal Margins
ESC 9	1B 39	27 57	Half-Line Feed
ESC =	1B 3D	27 61	Reset
ESC E	1B 45	27 69	Turn On Display Functions Mode
ESC Y	1B 59	27 89	Turn Off Display Functions Mode
ESC Z	1B 5A	27 90	Select Printer Language
ESC DEL n	1B 7F n	27 127 n	

: ASCII Type number 'ID' : ASCII numeric and Alphabet [data] : Binary data

13.2 HP GL/2 Commands

Table13-2 HP GL/2 Control Codes(1/2)

Code	Hexadecimal	Decimal	Function
AA	41 41	65 65	ARC Absolute
AC	41 43	65 67	Anchor Corner
AD	41 44	65 68	Alternate Font Definition
AR	41 52	65 82	ARC Relative
AT	41 54	65 84	Absolute ARC-Three Point
BR	42 52	66 82	Bezier Relative
BZ	42 5A	66 90	Bezier Absolute
CF	43 46	67 70	Character Fill Mode
CI	43 49	67 73	Circle
CO	43 4F	67 79	Comment
CP	43 50	67 80	Character Plot
DF	44 46	68 70	Default Values
DI	44 49	68 73	Direction Absolute
DR	44 52	68 82	Direction Relative
DT	44 54	68 84	Define Label Terminator
DV	44 56	68 86	Define Variable Text Pen
EA	45 41	69 65	Rectangle Edge Absolute
EP	45 50	69 80	Edge Polygon
ER	45 52	69 82	Rectangle Edge Relative
ES	45 53	69 83	Extra Space
EW	45 57	69 87	Wedge Edge
FI	46 49	70 73	Primary Font by ID
FN	46 4E	70 78	Secondary Font by ID
FP	46 50	70 80	Fill polygon
FT	46 54	70 84	Fill Type
IN	49 4E	73 78	Initialize
IP	49 50	73 80	Input P1 and P2
IR	49 52	73 82	Input Relative P1 and P2
IW	49 57	73 87	Input Window
LA	4C 41	76 65	Line Attribute
LB	4C 42	76 66	Label Text
LO	4C 4F	76 79	Label Origin
LT	4C 54	76 84	Line Type
NP	4E 50	78 80	Number of Pens
PA	50 41	80 65	Plot Absolute
PD	50 44	80 68	Pen Down
PE	50 45	80 69	Polygon Encoded
PM	50 4D	80 77	Polygon Mode
PR	50 52	80 82	Plot Relative
PU	50 55	80 85	Pen Up
PW	50 57	80 87	Pen Width
RA	52 41	82 65	Rectangle Absolute Filled
RF	52 46	82 70	Raster Fill Definition
RO	52 4F	82 79	Rotate Coordinate System
RR	52 52	82 82	Rectangle Relative Filled
RT	52 54	82 84	Relative ARC-Three Point

Table13-2 HP GL/2 Control Codes(2/2)

Code	Hexadecimal	Decimal	Function
SA	53 41	83 65	Alternate Character Set
SB	53 42	83 66	Bitmap Font Enable
SC	53 43	83 67	Scale
SD	53 44	83 68	Standard Font Definition
SI	53 49	83 73	Character Size Absolute
SL	53 4C	83 76	Character Slant
SM	53 4D	83 77	Symbol Mode
SP	53 50	83 80	Select Pen
SR	53 52	83 82	Character Size Relative
SS	53 53	83 83	Standard Character Set
SV	53 56	83 86	Screened Vectors
TD	54 44	84 68	Transparent Data
TR	54 52	84 82	Transparency Mode
UL	55 4C	85 76	User-Defined Line Type
WG	57 47	87 71	Wedge with Fill
WU	57 55	87 85	Pen Width Unit Selection
(RQ	52 52	82 81)	

13.3 PCLXL Commands

Table13-3 PCLXL Commands(1/3)

Group	Operator	Code	Description	Atributes	Code
Session	Begin Session	41	Define an imaging Session	Measure UnitsPerMeasure ErrorReport	86 89 8F
	End Session	42	End an imaging Session definition	—	—
Page Control	Begin Session	43	Define a new page	Orientation MediaSource MediaSize CustomMediaSize CustomMediaSizeUnits SimplexPageMode DuplexPageMode DuplexPageSide	28 26 25 2F 30 34 35 36
	EndPage	41	End a page definition	—	—
Data Source	OpenDataSource	48	Define the data source	SourceType DataOrg	88 82
	CloseDataSource	49	Close the Data Source	—	—
DLL Font	BeginFontHeader	4F	Define a downloaded font	FontName FontFormat	A8 A9
	ReadFontHeader	50	Read font header data	FontHeaderLength	A7
	EndFontHeader	51	End the definition of the downloaded font	—	—
	BeginChar	52	define characters for a downloaded font	FontName	A8
	ReadChar	53	Read character data	CharCode CharDataSize	A2 A3
	EndChar	54	End the definition of characters	—	—
	RemoveFont	55	Delete a downloaded font	FontName	A8
User Defined Stream	BeginStream	5B	define a user-defined stream	StreamName	8B
	ReadStream	5C	Read the user-defined stream data	StreamDataLength	8C
	EndStream	5D	End the definition of a user-defined stream	—	—
	ExecStream	5E	Execute a user-defined stream	StreamName	8B
Configuration/ Status	Comment	47	Add a comment	CommentData	81
	PopGS	60	Restore the saved graphics state	—	—
	PushGS	61	Save the current graphics state	—	—
	SetClipReplace	62	Replace the clip region with the intersection	ClipRegion	53
	SetClipIntersect	67	Define an imaging Session	ClipRegion	53
	SetClipRectangle	68	Set the clip region to the rectangle area	ClipRegion Boundingbox	53 42
	SetClipTopPage	69	Limit the clip path to the current page	—	—
	SetPageDefaultCTM	74	Reset the coordination transformation matrix	—	—
	SetPageOrigin	75	Set the origin coordinates	PageOrigin	2A
	SetPageRotation	76	Rotate the page coordinate system	PageAngle	29
	SetPageScale	77	Scale the page coordinate system	PageScale	2B
	SetClipMode	7F	Set the clip path mode	ClipMode	54
	SetPathToClip	80	Replace the current path by the clip path	—	—
Drawings	SetBrushSource	63	Set the paint source	RGBColor GreyLevel NullBrush PatternSelectID PatternOrigin NewDestinationSize	0B 09 04 08 0C 0D
	SetFillMode	6E	Set the current fill mode for painting	FillMode	46
	SetLineDash	70	Set the line dash style	SolidLine LineDashStyle DashOffset	4E 4A 43
	SetLinecap	71	Set the shape of end of line	LineCapStyle	47
	SetLineJoin	72	Set the line join style	LineJoinStyle	48
	SeMiterLimit	73	Set the limit of miter length	MiterLength	49

Table13-3 PCLXL Commands(2/3)

Group	Operator	Code	Description	Atributes	Code
				YSpacingData	
Font Modification	TextPath	A9	Define a text path	TextData XSpacingData YSpacingData	AB
	SetCharAngle	64	Set the character rotation angle	CharAngle	A1
	SetCharScale	65	Set the character scaling factor	CharScale	A4
	SetCharShear	66	Set the character Scaling Factor	CharShear	A5
	SetCharBoldValue	7D	Set the character boldness	CharBoldValue	B1
	SetCharSubMode	81	Set the character vertical substitution mode	CharSubModeArray	AC
Color/ Gradation	SetColorSpace	6A	Set the color Space	ColorSpace PaletteData PaletteDepth	03 06 02
	SetHalftoneMethod	6D	Set the halftone method with specified dither Matrix	DitherMatrix DitherMatrixDataType DitherMatrixSize DitherMatrixSepth DitherOrigin	21 22 32 33 23
Logical Operation Print Model	SetROP	7B	Set the logical operation mode	ROP3	2C
	SetPaintTxMode	78	Set the paint(pattern) trasparency mode	TxMode	2D
	SetSourceTxMode	7C	Set the source trasparency mode	TxMode	2D
Image	BeginImage	B0	Define an image	ColorDepth ColorMapping	62 64
				SourceWidth SourceHeight DestinationSize	6C 6B 67
	ReadImage	B1	Read a block of image data	CompressMode StaartLine BlockHeight	65 6D 63
	EndImage	B2	End the definition of an image	—	—
Raster Pattern	BeginRastPattern	B3	Define a raster pattern	ColorDepth ColorMapping SourceWidth SourceHeight DestinationSize PatternDefineLine PatternPersistence	62 64 6C 6B 67 69 68
	ReadRasterPattern	B4	Read a book of raster pattern data	CompressMode StartLine BlockHeight	65 6D 63
	EndRasterPattern	B5	Set the origin coordinates	—	—
Scan Line	BeginScan	B6	Rotate the page coordinate system	—	—
	EndScan	B8	Scale the page coordinate system	—	—
	ScanLineRel	B9	Set the clip path mode	NumberOfScanLines	73

Table13-3 PCLXL Commands(3/3)

Group	Operator	Code	Description	Atributes	Code
	SetPenSource	79	Set the pen color and style	RGBColor GreyLevel NullPen PatternSelectID PatternOrigin NewDestinationSize	0B 09 05 08 0C 0D
	SetPenWidth	7A	Set the pen width	PenWidth	4B
	CloseSubPath	84	Close a subpath	—	—
	NewPath	85	Delete the current path and the current cursor position	—	—
	PaintPath	86	Stroke the current path and paint the interior area	—	—
	ArcPath	91	Define an arc path	BoundingBox StartPoint EndPoint ArcDirection	42 4F 45 41
	BezierPath	93	Define a bezier path	ControlPoint1 ControlPoint2 EndPoint NumberOfPoint PointType	51 52 45 4D 50
	BezierrelPath	95	Define a bezier path relative to the current cursor Position	ControlPoint1 ControlPoint2 EndPoint NumberOfPoint PointType	51 52 45 4D 50
	Chord	96	Paint a chord	BoundingBox StartPoint EndPoint	42 4F 45
	ChordPath	97	Define a chord path	BoundingBox StartPoint EndPoint	42 4F 45
	Elipse	98	Paint an elipse	BoundingBox	42
	ElipsePath	99	Define an elipse path	BoundingBox	42
	LinePath	9B	Define a line path from the current cursor position to the End Point	EndPoint NumberOfPoint PointType	45 4D 50
	LineRelPath	9D	Define a line path relative to the current cursor position	EndPoint NumberOfPoint PointType	45 4D 50
	Pie	9E	Paint a pie area	BoundingBox StartPoint EndPoint	42 4F 45
	Piepath	9F	Define a pie path	BoundingBox StartPoint EndPoint	42 4F 45
	Rectangle	A0	Paint a rectangle	BoundingBox	42
	RectanglePath	A1	Paint a rectangle path	BoundingBox	42
	RoundRectangle	A2	Paint a rectangle path with round corners	BoundingBox ElipsDimention	42 44
	RoundRectanglePath	A3	Define a rectangle path with round corners	BoundingBox ElipsDimention	42 44
Font Select	SetFont	6F	Set the current fill mode for painting	FontName CharSize SymbolSet	A8 A6 AA
Cursor Positioning	SetCursorXY	6B	Set the cursor position	Point	4C
	SetCursorRel	6C	Set the cursor position relative to the current position	Point	4C
Text	Text	A8	Print text	TextData XSpacing	AB

13.4 PJL Commands

Table13-4 PJL Commands

Function	Code	OKI Spec C/HP Spec	Remark
Cancels PJL Mode to switch the mode to other language	ENTER LANGUAGE=personality	HP SPEC	
Ignores as a comment	COMMENT	HP SPEC	
Sets JOB Name	JOB[NAME="job name"] [START=first page] [END=last page]	HP SPEC	
Sets JOB End	EOJ[NAME="jobname"]	HP SPEC	
Sets factory default to Menu value and current PJL value	INITIALIZE	HP SPEC	
Sets Menu values to current PJL values	RESET	HP SPEC	
Modifies Menu values to designated ones	DEFAULT[LPARM:personality] variable=value	HP SPEC	
Sets PJL variables valid only within the same PJL JOBs.	SET[LPARM:personality] variable=value	HP SPEC	
Returns values within PJL	INQUIRE[LPARM:personality] variable	HP SPEC	
Returns Menu set values	DINQUIRE[LPARM:personality] variable	HP SPEC	
Returns current printer setup for current PJL values, PJL setting and selection range	INFO category	HP SPEC	
Returns the same character strings as received <Words> to Host	ECHO[<Words>]	HP SPEC	
Designates settings of the command that returns status voluntarily from Printer to Host	USTATUS variable=value	HP SPEC	
Clears the state in which status is voluntarily returned from Printer to Host.	USTATUSOFF	HP SPEC	
Displays a designated message on Control Panel	OPMSG DISPLAY="message"	HP SPEC	
Displays a designated message on Control Panel instead of READY message.	RDYMSG DISPLAY="message"	HP SPEC	
Displays a designated message on Control Panel and makes the printer Off-line.	STMSG DISPLAY="message"	HP SPEC	

13.5 SIDM Commands Summary

13.5.1 IBM PPR emulation Commands

Table13-5 IBM PPR emulation Commands(1/2)

Function	Command Sequence	B4300/B4200
Beeper	BEL	Trap
Back Space	BS	O
Horizontal Tab	HT	O
Line Feed	LF	O
Vertical Tab	VT	O
Form Feed	FF	O
Carriage Return	CR	O
Select Double Wide Mode (1line only)	SO	O
Select Condensed Mode	SI	O
Cancel Print Suppress Mode	DC1	O
Select 10CPI	DC2	O
Cancel Double Wide Mode(1line only)	DC4	O
Cancel Data	CAN	Trap
Select Barcode	ESC DLE A p1 n1-8	Trap
Print Barcode Data	ESC DLE B p1 pm data	Trap
Print Postnet Barcode	ESC DLE C p1 data	Trap
Select Condensed Mode(20CPI)	ESC SI	O
Cut Sheet Feeder control	ESC EM pn	O
Select International Character Set	ESC ! pn	Trap
Select HSD	ESC # 0	Trap
Copy std set to DLL CG	ESC $	O
PJL UEL command	ESC % -12345X	O
Perform n/144" LF	ESC % 5 pn	Trap
Select n/144" Line Spacing	ESC % 9 pn	Trap
Set Print Position by Dot	ESC % B pn1-pn4	Trap
Select Italic Mode	ESC % G	O
Cancel Italic Mode	ESC % H	O
Turn Underlining Mode ON/OFF	ESC - pn	O
Select 1/8" line spacing	ESC 0	O
Select 7/72" line spacing	ESC 1	O
Start n/72" line spacing	ESC 2	O
Select 1/216" line spacing	ESC 3 pn	O
Set TOF	ESC 4	O
Turn Automatic LF Mode ON/OFF	ESC 5 pn	O
Select Character Set2	ESC 6	O
Select Character Set1	ESC 7	O
Disable Paper Out sensor	ESC 8	Trap
Enable Paper Out sensor	ESC 9	Trap
Select 12CPI	ESC :	O
Character Font Image Download	ESC = ln hn p1 p2	O
Trap	ESC > pn	Trap
Reassign Graphics Mode	ESC ? pn	Trap
Trap	ESC @ pn	Trap
Select n/72" line spacing	ESC A pn	O
Set VT	ESC B pn1..pnk 00	O

Table13-5 IBM PPR emulation Commands(2/2)

Function	Command Sequence	B4300/B4200
Set Page Length in lines	ESC C pn	O
Set Page Length in inches	ESC C 00 pn	O
Set HT	ESC D pn1..pnk 00	O
Select Emphasize	ESC E	O
Cancel Emphasize	ESC F	O
Select Double Strike	ESC G	O
Cancel Double Strike	ESC H	O
Select print Mode	ESC I pn	O
Perform n/216” LF	ESC J pn	O
Select Single density Graphics	ESC K ln hn data	O
Select Double Density Graphics	ESC L ln hn data	O
Trap	ESC M pn	Trap
Set Skip Over Perforation	ESC N n	O
Cancel Skip Over Perforation	ESC O	O
Turn Proportional Mode ON/OFF	ESC P pn	O
Select Print Suppress Mode	ESC Q pn	O
Set All Tabs to Power On settings	ESC R	O
Select Super/Sub Script Mode	ESC S pn	O
Cancel Super/Sub Script Mode	ESC T	O
Turn Uni-Directional Mode On/OFF	ESC U pn	Trap
Set Inter character Space	ESC V pn	Trap
Turn Double Wide Mode ON/OFF	ESC W pn	O
Set Left/Right Margins	ESC X pn pm	O
Select High Speed Double Density Graphics	ESC Y ln hn data	O
Select Quadruple Density Graphics	ESC Z ln hn data	O
Turn Double High Wide,Line Spacing Mode	ESC [@ ln hn pm1..pmk	O
ON/OFF	ESC [pm ln hn	Trap
Trap command	ESC [K ln hn init id p1 p2	O
Set Initial Condition	ESC [T ln hn NUL NUL hcp lcp	O
Select Codepage	NUL	O
Print Continuously from All Character Chart	ESC \ ln hn	O
Reverse LF	ESC]	O
Print Single from All Character Chart	ESC ^ pn	O
Turn Overscore Mode ON/OFF	ESC _ pn	Trap
Relative move inline forward	ESC d ln hn	Trap
Relative move inline backward	ESC e ln hn	Trap
Trap	ESC f pn	Trap
Select 15CPI	ESC g	Trap
Select Print Suppress Mode(Stop Printing)	ESC j	Trap
Select aSpect ratio	ESC n pn	Trap
Select color Mode	ESC r pn	Trap
Change Emulation Mode	ESC { pn	Trap
Set Relative Print Position	ESC | ln hn	Trap
Soft I-PRIME	ESC } NUL	Trap
Set Print Head Thermal Alarm Check Mode	ESC ~	Trap
Set Print Position	ESC DLE @ pno a1 a2 p1-p4	Trap
Emulation Change	ESC DEL n	O
Multi Port I/F	ESC / i n L	X

13.5.2 EPSON FX emulation Commands

Table13-6 EPSON FX emulation Commands(1/2)

Function	Command Sequence	B4300/B4200
Beeper	BEL	Trap
Back Space	BS	O
Horizontal Tab	HT	O
Line Feed	LF	O
Vertical Tab	VT	O
Form Feed	FF	O
Carriage Return	CR	O
Select Double Wide Mode (1line only)	SO (ESC SO)	O
Select Condensed Mode	SI (ESC SI)	O
Cancel Print Suppress Mode	DC1	Trap
Cancel Condensed Mode	DC2	O
Select Print Suppress Mode(Stop Printing)	DC3	Trap
Cancel Double width	DC4	O
Cancel Data	CAN	Trap
Delete Character	DEL	Trap
Select Barcode	ESC DLE A p1 n1-8	Trap
Print Barcode Data	ESC DLE B p1 pm data	Trap
Print Postnet Barcode	ESC DLE C p1 data	Trap
Cut Sheet Feeder control	ESC EM pn	O
Set Inter character Space	ESC SP pn	O
Master select	ESC ! pn	O
Cancel MSB control	ESC #	O
Set Absolute print Position	ESC $ ln hn	O
Set User Define	ESC %	O
PJL UEL command	ESC % -12345X	O
Perform n/144" LF	ESC % 5 pn	Trap
Select n/144" Line Spacing	ESC % 9 pn	Trap
Define User Defined Characters	ESC & NUL pn1 pn2 pa1 data	O
Select HSD	ESC (pn	Trap
Select Graphics Mode	ESC * pm ln hn data	O
Turn Underlining Mode ON/OFF	ESC - pn	O
Select VT channel	ESC /	O
Select 1/8" line spacing	ESC 0	O
Select 7/72" line spacing	ESC 1	O
Start n/72" line spacing	ESC 2	O
Select 1/216" line spacing	ESC 3 pn	O
Select Italic Mode	ESC 4	O
Cancel Italic Mode	ESC 5	O
Printable Code Area Expansion	ESC 6	O
Cancel ESC 6	ESC 7	O
Disable Paper Out sensor	ESC 8	Trap
Enable Paper Out sensor	ESC 9	Trap
Copy ROM into RAM	ESC : NUL pn NUL	O
Select Uni Directional Mode (1line)	ESC <	O
Set MSB to 0	ESC =	O
Set MSB to 1	ESC >	O
Resign Graphics Mode	ESC ? pm pn	O

Table13-6 EPSON FX emulation Commands(2/2)

Function	Command Sequence	B4300/B4200
Initialize Printer	ESC @	O
Select n/72" line spacing	ESC A pn	O
Set VT	ESC B pn1..pnk 00	O
Set Page Length in lines	ESC C pn	O
Set Page Length in inches	ESC C 00 pn	O
Set HT	ESC D pn1..pnk 00	O
Select Emphasize	ESC E	O
Cancel Emphasize	ESC F	O
Select Double Strike	ESC G	O
Cancel Double Strike	ESC H	O
Printable Code Area Expansion	ESC I pn	O
Perform n/216" LF	ESC J pn	O
Select Single density Graphics	ESC K ln hn data	O
Select Double Density Graphics	ESC L ln hn data	O
Select 12CPI	ESC M	O
Set Skip Over Perforation	ESC N pn	O
Cancel Skip Over Perforation	ESC O	O
Select 10CPI	ESC P	O
Set Right Margin	ESC Q pn	O
Select International Character Set	ESC R pn	O
Select Super/Sub Script Mode	ESC S pn	O
Cancel Super/Sub Script Mode	ESC T	O
Turn Uni-Directional Mode On/OFF	ESC U pn	Trap
Turn Double Wide Mode ON/OFF	ESC W pn	O
Select High Speed Double Density Graphics	ESC Y ln hn data	O
Select Quadruple Density Graphics	ESC Z ln hn data	O
Select Relative Position	ESC \ ln hn	O
Select 9pin Graphics	ESC ^ pm ln hn data	O
Select Justification	ESC a pn	Trap
Set VT in Channels	ESC b pm pn1..pnk NUL	O
Set Relative tab stop	ESC e pn1 pn2	Trap
Set relative print position	ESC f pn1 pn2	Trap
Select 15CPI	ESC g	Trap
Turn incremental print Mode ON/OFF	ESC i pn	Trap
Perform n/216" Reverse LF	ESC j pn	O
Select NLQ	ESC k pn	Trap
Set Left Margin	ESC l pn	O
Tripl width	ESC m pn	Trap
Set Proportional	ESC p pn	O
Select color Mode	ESC r pn	Trap
Turn Half Speed Mode ON/OFF	ESC s pn	Trap
Select Character Table	ESC t pn	O
Turn Double Height Mode ON/OFF	ESC w pn	O
Select NLQ or Draft	ESC x pn	Trap
Change Emulation Mode	ESC { pn	Trap
Soft I-PRIME	ESC } NUL	Trap
Set Print Head Thermal Alarm Check Mode	ESC ~	Trap
Set Print Position	ESC DLE @ pno a1 a2 p1-p4	Trap
Emulation Change	ESC DEL n	O

13.6 Back channel message in PSE mode

(1) The printer returns the current status via back channel when the host inquires the status.
(2) The printer voluntarily returns the details of the error via back channel when an error occurs during job processing.
(3) As the above shows, there are two types of back channel messages: status and printer error.
(4) An output device defined by a communication device in use is used for back channel. The default output device of each communication device is the communication device. That is, Centro's default back channel is Centro.
(5) PS operator can change or disable Output Device. For example, it is possible to change Centro back channel to USB.

13.6.1 Status message formats

The message format while the printer is not processing PS data is as follows.

%%[status: <a message in Table 17-30>] %%

The message format while the printer is processing PS data is as follows.

%%[job: <job name>; status: <a message in Table 17-30>; source: <one of the items in Section21.6.3>] %%

13.6.2 Printer error message format

The message format is as follows.

%%[status: <A message in table 17-30>]%%

13.6.3 Messages in source field

Communication devices currently being used in the following.

Parallel
USB
Network I/F (B410dn/B420dn/B430dn/B440dn)

13.6.4 Status Messages

Table13-7 Status messages(1/2)

Grayed parts: This device does not display,

	Message	Meaning
1	idle	Printer idling
2	Busy	Job in process
3	Waiting	Waiting for data
4	PrinterError: reprint request	Request preprint (BakerAtlas support)
5	PrinterError: page overrun error	Page overrun(BakerAtlas support)
6	PrinterError: tray liftup error	A3 machine tray lift-up error
7	PrinterError: waiting for manual feed	Manual feed request
8	PrinterError: warmup error	TBD: Countermeasure for PU bug. Will be deleted later.
9	PrinterError: centro i/f error	Centro error
10	PrinterError: usb i/f error	USB error
11	PrinterError: rs232c i/f overflow error	RS232C error (PN63 series)
12	PrinterError: rs232c i/f overrun error	RS232C error (PN63 series)
13	PrinterError: rs232c i/f parity error	RS232C error(PN63 series)
14	PrinterError: rs232c i/f framing error	RS232C error (PN63 series)
15	PrinterError: network i/f error	Network card error
16	PrinterError: either paper empty,or no tray installed	Paper source tray empty
17	PrinterError: stacker full error	Top eject bin full
18	PrinterError: stacker full error	Finisher eject bin full (PX701 series)
19	PrinterError: tray request	Paper size change request
20	PrinterError: media type request	TBD: Consolidate in TRAY_REQUEST
21	PrinterError: stapler cartridge missing	No Staple cartridge (Finisher)
22	PrinterError: punch box missing	No PunchBox (Finisher)
23	PrinterError: finisher not connected	Finisher not installed (Finisher)
24	PrinterError: unsuitable size	Unusable paper size
25	PrinterError: cover open	No tray on the paper feed path
26	PrinterError: tray missing	No paper source tray
27	PrinterError: memory overflow	Memory shortage (PX701 series)
28	PrinterError: toner empty error	Toner empty (PX701 series)
29	PrinterError: paper thick error	Auto paper weight detection error
30	PrinterError: multi feed	Multi-feed
31	PrinterError: paper size error	The size of the fed paper is incorrect.
32	PrinterError: hopping error	Feed jam from MP tray (PX701 series)
33	PrinterError: hopping error	Feed jam from a tray (After eject, stops.)
34	PrinterError: paper exit jam	Paper path jam (Open TopCover.)
35	PrinterError: paper feed jam	Paper path jam (Open TopCover.)
36	PrinterError: paper feed jam	Paper path jam (Open TopCover.)
37	PrinterError: paper feed jam	Paper path jam (Open TopCover.)
38	PrinterError: paper feed jam	Paper path jam (Open Front and SideCover.)
39	PrinterError: paper duplex feed jam	DUPLEX reversing path jam, immediately stops (PX701 series)
40	PrinterError: paper duplex input jam	DUPLEX paper feed error/input jam eject (PX701 series)

Table13-7 Status messages(2/2)

Grayed parts: This device does not display,

	Message	Meaning
41	PrinterError: paper finisher input jam	Jam in the Finisher (Finisher)
42	PrinterError: paper finisher input jam	Jam in the Finisher (Finisher)
43	PrinterError: paper finisher input jam	Jam in the Finisher (Finisher)
44	PrinterError: paper finisher feed jam	Jam in the Finisher (Finisher)
45	PrinterError: paper finisher feed jam	Jam in the Finisher (Finisher)
46	PrinterError: paper finisher exit jam	Jam in the Finisher (Finisher)
47	PrinterError: paper finisher exit jam	Jam in the Finisher (Finisher)
48	PrinterError: duplex unit open	DUPLEX UNIT is open (PX703 only)
49	PrinterError: image drum life	Image drum life
50	PrinterError: drum missing	Image drum not installed
51	PrinterError: belt unit not installed	Belt not installed (PX701 series)
52	PrinterError: motor overheat	Motor heat error
53	PrinterError: fuser unit not installed	Fuser not installed
54	PrinterError: cover open	Top/Duplex unit cover open
55	PrinterError: network error	Network card error (TBD: need to check)
56	PrinterError: density calibration chip error	Color misregistration sensor error

14. PROGRAMMING HINTS

All commands sent to the printer are processed in the order in which they are received. All values or “settings” of these commands are “set” (stored in the printer’s memory) if they are valid values, each command “set” has no effect on, or after other command settings.

The following command’s values are not “set” under the indicated condition...

a) Top Margin Set exceeds the Page Length
b) Text Margin Set exceeds the Page Length - Top Margin
c) Right Margin Set is less than the Left Margin Set
d) Left Margin Set is greater than the Right Margin Set

(1) Font Selection Hierarchy

When the printer receives a font select command, which specifies desired font attributes, the attribute information is stored but is not implemented. When each printable character is received, the stored font attributes are compared to the actual fonts that exist (either resident fonts or cartridge fonts) and the font that matches the attribute information is selected as the active font. If an exact match cannot be made between the desired attributes and the actual existing fonts, the selected font is the one that best matches the desired attributes. According to the following table, the high priority items are checked first for a match and then the lower priority items. Once the best match is found, the rest of the attribute information is not used.

1	Symbol set	(Roman-8, US ASCII, etc.)
2	Proportional/fixed spacing	
3	Font pitch	
4	Character height	(Height: point size)
5	Character style	(Upright/Italic)
6	Stroke weight	(Light, Medium, Bold)
7	Typeface	(Courier, Times, etc.)
8	Resolution	(600 dpi Bitmap)
9	Location	(Soft font Resident font)
10	Orientation	(Portrait, Landscape)

15. SOFTWARE SPECIFICATIONS

15.1 Supported OS

OS	Version
Windows	2000, XP (32/64Bit), 2003 Server (32/64Bit), Vista (32/64Bit)
Macintosh	OS X 10.2 ~ 10.5.2 (PowerPC) OS X 10.4.4 ~ 10.5.2 (Intel) OS 9.0 ~ 9.2.2 (PowerPC)

15.2 List of Supported Software

B410/B420 Software compatibility table

Modules	OS	Models			Comments
		B410d	B410dn	B420dn	
PCL Driver	32Bit: Win 2000/ XP/ 2003/ Vista	○	○	○	
	64Bit: WinXP/ 2003/ Vista	○	○	○	
	MacOS9	○	○	○	
	MacOSX	○	○	○	
PS Driver	32Bit: Win 2000/ XP/ 2003/ Vista				
	64Bit: Win XP/ 2003/ Vista				
	MacOS9				
	MacOSX				
Driver Installer	Win	○	○	○	Supporting Japan (AOS-2 Byte) ver. Other regions may be supported by ODA/OEL (AOS-1 Byte)
Web Driver Installer	Win	○	○	○	Vista NOT compatible
OKI LPR Utility	Win		○	○	Vista NOT compatible
Network Extention	Win		○	○	Vista compatible
JA(Client)	Win	○	○	○	Vista NOT compatible
	Mac	○	○	○	For OSX
JA(Server)	Win	○	○	○	Vista compatible
JA Lite(Server)	Win		○		Available only for Japan ver. /Vista supported.
PSV(.net)	Win		○	○	Vista compatible
PSV(JAVA)	Win/ Linux/ Solaris		○	○	Vista NOT compatible
NIC Setup Utility(Silex)	Win		○	○	Vista compatible/ Only for Network models
NIC Setup Utility(Silex)	Mac		○	○	Network models only
PS Gamma Adjust	Win				
	Mac				
SDM	Win			○	JP/AOS-2Byte ver.: Vista NOT compatible/ ODA/OEL(AOS-1Byte) ver: Vista compatible
	Mac			○	For OS9
PanelDW	Win	○	○	○	
	Mac	○	○	○	For B440, OEL (AOS-1Byte) ver. Only./ B420 support is NBC.
Printer Menu Setup Tool	Win	○	○		
Menu Setup(SM)	Mac	○	○		
Network Status Monitor	Win		○		Releasing only for Japan ver.
NDPS GW	Netware		○	○	Generic ver. Only for Network models
Maintenance Utility	Win	○	○	○	Will be supported at 2/E release

15.3 List of Supported Software

B430/B440 Software compatibility table

Modules	OS	Models			Comments
		B430d	B430dn	B440dn	
PCL Driver	32Bit: Win 2000/ XP/ 2003/ Vista	○	○	○	
	64Bit: Win XP/ 2003/ Vista	○	○	○	
	MacOS9	○	○	○	
	MacOSX	○	○	○	
PS Driver	32Bit: Win 2000/ XP/ 2003/ Vista	○	○	○	
	64Bit: Win XP/ 2003/ Vista	○	○	○	
	MacOS9	○	○	○	
	MacOSX	○	○	○	
Driver Installer	Win	○	○	○	Supporting Japan (AOS-2 Byte) ver. Other regions may be supported by ODA/OEL (AOS-1 Byte)
Web Driver Installer	Win	○	○	○	Vista NOT compatible
OKI LPR Utility	Win		○	○	Vista NOT compatible
Network Extention	Win		○	○	Vista compatible
JA(Client)	Win	○	○	○	Vista NOT compatible
	Mac	○	○	○	For OSX
JA(Server)	Win	○	○	○	Vista compatible
JA Lite(Server)	Win		○		Available only for Japan ver. /Vista supported.
PSV(.net)	Win		○	○	Vista compatible
PSV(JAVA)	Win/ Linux/ Solaris		○	○	Vista NOT compatible
NIC Setup Utility(Silex)	Win		○	○	Vista compatible/ Only for Network models
NIC Setup Utility(Silex)	Mac		○	○	Network models only
PS Gamma Adjust	Win	○	○	○	Vista compatible
	Mac	○	○	○	For OSX
SDM	Win	○	○	○	JP/AOS-2Byte ver.: Vista NOT compatible/ ODA/OEL(AOS-1Byte) ver: Vista compatible
	Mac	○	○	○	For OS9
PanelDW	Win	○	○	○	
	Mac	○	○	○	For B440, OEL (AOS-1Byte) ver. Only./ B420 support is NBC.
Printer Menu Setup Tool	Win				
Menu Setup(SM)	Mac				
Network Status Monitor	Win		○		Releasing only for Japan ver.
NDPS GW	Netware		○	○	Generic ver. Only for Network models
Maintenance Utility	Win	○	○	○	Will be supported at 2/E release